

**PART 70 OPERATING PERMIT**

**INDIANA DEPARTMENT OF ENVIRONMENTAL  
MANAGEMENT  
OFFICE OF AIR QUALITY  
and  
INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES**

**IPL Georgetown Substation Generating Plant  
8198 Georgetown Road  
Indianapolis, Indiana 46268**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15, IC 13-17 and the Code of Indianapolis and Marion County, Chapter 511.

Operation Permit No.: <b>T097-13705-00352</b>
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<p>Issued by:</p> <p>Original signed by Janet G. McCabe</p> <p>Janet G. McCabe Assistant Commissioner IDEM Office of Air Quality</p> <p>Original signed by John B. Chavez</p> <p>John B. Chavez Administrator Indianapolis Office of Environmental Services</p>	<p>Issuance Date: December 10, 2003</p> <p>Expiration Date: December 9, 2008</p>
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## SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) and Indianapolis Office of Environmental Services (OES). The information describing the source contained in conditions A.1 and A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

### A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

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The Permittee owns and operates a stationary electric utility generating station.

Responsible Official:	Vincent Zehnle, Team Leader
Source Address:	8198 Georgetown Road, Indianapolis, Indiana, 46268
Mailing Address (operator):	Indianapolis Power & Light Company, 3700 S. Harding Street, Indianapolis, Indiana 46217
Owner:	DTE Georgetown, LLC and Indianapolis Power and Light Company
Mailing Address (owner):	P.O. Box 8614, 425 S. Main Street, Suite 201, Ann Arbor, MI 48107
Source Telephone:	(317) 788-5330
SIC Code:	4911
County Location:	Marion
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Minor Source under PSD Rules; one of 28 Source Categories Minor Source, Section 112 of the Clean Air Act

### A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

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This stationary source consists of the following emission units and pollution control devices:

Four (4) General Electric simple cycle, natural gas-fired combustion turbines EU GT1, GT2, GT3 (commenced operation on May 2, 2000), and GT4 (commenced operation on April 24, 2001), rated at 88.4 MW electrical output (924 MMBtu/hr heat input, as defined in 40 CFR 72.2) each at peak load (59 degrees Fahrenheit at 860 feet), exhausting to stacks ID GT-1, GT-2, GT-3, and GT-4. Nitrogen Oxide (NOx) emissions are controlled by dry low NOx combustors.

### A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

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This stationary source does not currently have any insignificant activities, as defined in 326 IAC 2-7-1(21) that have applicable requirements.

### A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

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This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability); and
- (c) It is an affected source under Title IV (Acid Deposition Control) of the Clean Air Act, as defined in 326 IAC 2-7-1(3).

## SECTION B GENERAL CONDITIONS

### B.1 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

### B.2 Permit Term [326 IAC 2-7-5(2)] [326 IAC 2-1.1-9.5]

This permit is issued for a fixed term of five (5) years from the original date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit or of permits issued pursuant to Title IV of the Clean Air Act and 326 IAC 21 (Acid Deposition Control).

### B.3 Enforceability [326 IAC 2-7-7]

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, OES, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

### B.4 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

### B.5 Severability [326 IAC 2-7-5(5)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

### B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

This permit does not convey any property rights of any sort, or any exclusive privilege.

### B.7 Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)] [326 IAC 2-7-6(6)]

- (a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

and

Indianapolis OES  
2700 South Belmont Avenue,  
Indianapolis, IN 46221

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall furnish to IDEM, OAQ, and OES within a reasonable time, any information that IDEM, OAQ, and OES may request in writing to determine whether cause exists for

modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). Upon request, the Permittee shall also furnish to IDEM, OAQ, and OES copies of records required to be kept by this permit or, for information claimed to be confidential, the Permittee may furnish such records directly to the U. S. EPA along with a claim of confidentiality. [326 IAC 2-7-5(6)(E)]

- (c) The Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

**B.8 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]**

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- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for:
  - (1) Enforcement action;
  - (2) Permit termination, revocation and reissuance, or modification; or
  - (3) Denial of a permit renewal application.
- (b) Noncompliance with any provision of this permit, except any provision specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act.
- (c) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- (d) An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

**B.9 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]**

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- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification. One (1) certification can cover multiple forms in one (1) submittal.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

**B.10 Annual Compliance Certification [326 IAC 2-7-6(5)]**

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- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than April 15 of each year to:



Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

and

Indianapolis OES  
2700 South Belmont Avenue,  
Indianapolis, IN 46221

and

United States Environmental Protection Agency, Region V  
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3590

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and OES on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
  - (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
  - (2) The compliance status;
  - (3) Whether compliance was continuous or intermittent; and
  - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3).

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

**B.11 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)]**  
**[326 IAC 1-6-3]**

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- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:
    - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
    - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
    - (3) Identification and quantification of the replacement parts that will be maintained in

inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

and

Indianapolis OES  
2700 South Belmont Avenue,  
Indianapolis, IN 46221.

The PMP and the PMP extension notification do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ, and OES upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ and OES. IDEM, OAQ, and OES, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The submittal of the PMPs does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the OES Administrator makes a request for records to the Permittee, the Permittee shall furnish the records to the Administrator within a reasonable time.

#### B.12 Emergency Provisions [326 IAC 2-7-16]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
  - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
  - (2) The permitted facility was at the time being properly operated;
  - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this

permit;

- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, and OES within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

IDEM: Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or  
Telephone Number: 317-233-5674 (ask for Compliance Section)  
Facsimile Number: 317-233-5967,

and

OES: Telephone Number: 317-327-2234  
Facsimile Number: 317-327-2274

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

and

Indianapolis OES  
2700 South Belmont Avenue,  
Indianapolis, IN 46221

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfils the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in

addition to any emergency or upset provision contained in any applicable requirement.

- (e) IDEM, OAQ, and OES may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(9) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ, and OES by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

**B.13 Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]**

- (a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

This permit shield does not extend to applicable requirements which are promulgated after the date of issuance of this permit unless this permit has been modified to reflect such new requirements.

- (b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, or OES shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.
- (d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
  - (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
  - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
  - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of

the Clean Air Act; and

- (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (f) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, and OES has issued the modifications. [326 IAC 2-7-12(c)(7)].
- (g) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, and OES has issued the modification. [326 IAC 2-7-12(b)(8)].

**B.14 Prior Permits Superseded [326 IAC 2-1.1-9.5]**

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- (a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either
  - (1) incorporated as originally stated,
  - (2) revised, or
  - (3) deletedby this permit.
- (b) All previous registrations and permits are superseded by this permit, except for permits issued pursuant to Title IV of the Clean Air Act and 326 IAC 21 (Acid Deposition Control).

**B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]**

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- (a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

and

Indianapolis OES  
2700 South Belmont Avenue,  
Indianapolis, IN 46221,

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.
- (c) Emergencies shall be included in the Quarterly Deviation and Compliance Monitoring Report.

**B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination**  
**[326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]**

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- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ, and OES determines any of the following:
  - (1) That this permit contains a material mistake.
  - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
  - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]
- (c) Proceedings by IDEM, OAQ, and OES to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ and OES at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, and OES may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

**B.17 Permit Renewal [326 IAC 2-7-3] [326 IAC 2-7-4]**

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- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ, and OES, and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

and

Indianapolis OES  
2700 South Belmont Avenue,  
Indianapolis, IN 46221

(b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]

(1) A timely renewal application is one that is:

(A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

(B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and OES, on or before the date it is due.

(2) If IDEM, OAQ, and OES, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

(c) Right to Operate After Application for Renewal [326 IAC 2-7-3] [326 IAC 2-7-4]

If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ, and OES take final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by a reasonable deadline specified in writing by IDEM, OAQ, and OES any additional information identified as being needed to process the application. [326 IAC 2-7-4(a)(2)(D) and (E)]

(d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)]

If IDEM, OAQ, and OES fail to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

B.18 Source Modification [326 IAC 1-2-42] [326 IAC 2-7-10.5]

(a) The Permittee shall obtain approval as required by 326 IAC 2-7-10.5 from the OAQ prior to making any modification to the source. Pursuant to 326 IAC 1-2-42, "Modification" means one (1) or more of the following activities at an existing source:

(1) A physical change or change in the method of operation of any existing emissions unit that increases the potential to emit any regulated pollutant that could be emitted from the emissions unit, or that results in emissions of any regulated pollutant not previously emitted.

(2) Construction of one (1) or more new emissions units that have the potential to emit regulated air pollutants.

(3) Reconstruction of one (1) or more existing emission units that increases the potential to emit of any regulated air pollutant.

- (b) Any application requesting a source modification shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

and

Indianapolis OES  
2700 South Belmont Avenue,  
Indianapolis, IN 46221

Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) The Permittee shall also comply with the applicable provisions of 326 IAC 2-7-11 (Administrative Permit Amendments) or 326 IAC 2-7-12 (Permit Modification) prior to operating the approved modification.

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**B.19 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12] [40 CFR 72]**

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

- (b) Pursuant to 326 IAC 2-7-11(b) and 326 IAC 2-7-12(a), administrative Part 70 permit amendments and permit modifications for purposes of the acid rain portion of a Part 70 permit shall be governed by regulations promulgated under Title IV of the Clean Air Act. [40 CFR 72]

- (c) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

and

Indianapolis OES  
2700 South Belmont Avenue,  
Indianapolis, IN 46221

Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (d) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

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**B.20 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)]  
[326 IAC 2-7-12 (b)(2)]**

- (a) No Part 70 permit revision shall be required under any approved economic incentives,



marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.

- (b) Notwithstanding 326 IAC 2-7-12(b)(1)(D)(i) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

B.21 Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:

- (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
- (2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;
- (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
- (4) The Permittee notifies the:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

and

Indianapolis OES  
2700 South Belmont Avenue,  
Indianapolis, IN 46221

and

United States Environmental Protection Agency, Region V  
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

- (5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-7-20(b), (c), or (e) and makes such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ, and OES, in the notices specified in 326 IAC 2-7-20(b), (c)(1), and (e)(2).

- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

- (1) A brief description of the change within the source;
- (2) The date on which the change will occur;
- (3) Any change in emissions; and
- (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) Emission Trades [326 IAC 2-7-20(c)]  
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).

#### B.22 Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, OES, and U.S. EPA or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy any records that must be kept under the conditions of this permit;
- (c) Inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

#### B.23 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be

submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

and

Indianapolis OES  
2700 South Belmont Avenue,  
Indianapolis, IN 46221

The application which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees to IDEM, OAQ, and OES within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ, and OES, the applicable fee is due April 1 of each year.
- (b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAQ, Technical Support and Modeling Section), and 317-327-2234 (ask for OES Air Compliance) to determine the appropriate permit fee.

## SECTION C

## SOURCE OPERATION CONDITIONS

Entire Source
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### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### C.1 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

#### C.2 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.

#### C.3 Incineration [326 IAC 4-2][326 IAC 9-1-2]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2. 326 IAC 9-1-2 is not federally enforceable.

#### C.4 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

#### C.5 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

The Permittee shall comply with the applicable requirements of 326 IAC 14-10, 326 IAC 18, and 40 CFR 61.140.

### Testing Requirements [326 IAC 2-7-6(1)]

#### C.6 Performance Testing [326 IAC 3-6]

- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015

Indianapolis, Indiana 46206-6015

and

Indianapolis OES  
2700 South Belmont Avenue,  
Indianapolis, IN 46221

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ, and OES not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, and OES, if the source submits to IDEM, OAQ, and OES a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

#### **Compliance Requirements [326 IAC 2-1.1-11]**

##### **C.7 Compliance Requirements [326 IAC 2-1.1-11]**

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

#### **Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]**

##### **C.8 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]**

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

and

Indianapolis OES  
2700 South Belmont Avenue,  
Indianapolis, IN 46221

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a source modification shall be implemented when operation begins.

**C.9 Maintenance of Continuous Emission Monitoring Equipment [326 IAC 2-7-5(3)(A)]**

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- (a) When required by Section D of this Permit, the Permittee shall install, calibrate, maintain, and operate all necessary continuous emission monitoring systems (CEMS) and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.
- (b) All continuous emission monitoring systems shall meet all applicable performance specifications of 40 CFR 60 or any other performance specification, and are subject to monitor system certification requirements pursuant to 326 IAC 3-5-3.
- (c) In the event that a breakdown of a continuous emission monitoring system occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.
- (d) When required to operate the CEMS, the Permittee shall comply with the requirements to operate a continuous emission monitoring system pursuant to 326 IAC 3-5.

**C.10 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]**

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Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60 Appendix A, 40 CFR 60 Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

**Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]**

**C.11 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]**

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Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

- (a) The Permittee prepared and submitted written emergency reduction plans (ERPs) consistent with safe operating procedures on July 7, 2000.
- (b) If the ERP is disapproved by IDEM, OAQ, and OES, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.
- (c) Upon direct notification by IDEM, OAQ, and OES, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

**C.12 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]**

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- (a) If a regulated substance, subject to 40 CFR 68, is present at a source in more than a threshold quantity, 40 CFR 68 is an applicable requirement.
- (b) The Permittee shall verify that a Risk Management Plan or a revised plan was prepared as required by 40 CFR 68 and submitted to IDEM, OAQ, and OES.

All documents submitted pursuant to this condition shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

C.13 Compliance Response Plan - Preparation, Implementation, Records, and Reports  
[326 IAC 2-7-5] [326 IAC 2-7-6]

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- (a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. If a Permittee is required to have an Operation, Maintenance and Monitoring (OMM) Plan or Parametric Monitoring Plan and Start-up, Shutdown, and Malfunction (SSM) Plan under 40 CFR 63, such plans shall be deemed to satisfy the requirements for a CRP for those compliance monitoring conditions. A CRP shall be submitted to IDEM, OAQ and OES upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:
- (1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.
  - (2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan or Parametric Monitoring Plan and Start-up, Shutdown, and Malfunction (SSM) Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan or Parametric Monitoring Plan and Start-up, Shutdown, and Malfunction (SSM) Plan to include such response steps taken.

The OMM Plan or Parametric Monitoring and SSM Plan shall be submitted within the time frames specified by the applicable 40 CFR 63 requirement.

- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:
- (1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan or Parametric Monitoring Plan and Start-up, Shutdown, and Malfunction (SSM) Plan; or
  - (2) If none of the reasonable response steps listed in the Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan or Parametric Monitoring Plan and Start-up, Shutdown, and Malfunction (SSM) Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.
  - (3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, and it will be 10 days or more until the unit or device will be shut down, then the permittee shall promptly notify the IDEM, OAQ of the expected date of the shut down. The notification shall also include the status of the applicable compliance monitoring parameter with respect to normal, and the results of the response actions taken up to the time of notification.
  - (4) Failure to take reasonable response steps shall be considered a deviation from the permit.

- (c) The Permittee is not required to take any further response steps for any of the following reasons:
  - (1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.
  - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for a minor permit modification to the permit, and such request has not been denied.
  - (3) An automatic measurement was taken when the process was not operating.
  - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.
- (e) The Permittee shall record all instances when response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

**C.14 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]  
[326 IAC 2-7-6]**

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- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

**Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

**C.15 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]**



- 
- (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by April 15 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:
- (1) Indicate estimated actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
  - (2) Indicate estimated actual emissions of other regulated pollutants (as defined by 326 IAC 2-7-1) from the source, for purposes of Part 70 fee assessment.

- (b) The annual emission statement covers the twelve (12) consecutive month time period starting December 1 and ending November 30. The annual emission statement must be submitted to:

Indiana Department of Environmental Management  
Technical Support and Modeling Section, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

and

Indianapolis OES  
2700 South Belmont Avenue,  
Indianapolis, IN 46221

The emission statement does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and OES on or before the date it is due.

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**C.16 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]**

- (a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner or the OES Administrator makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or the OES Administrator within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

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**C.17 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]**

- (a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of

this permit shall be submitted to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

and

Indianapolis OES  
2700 South Belmont Avenue,  
Indianapolis, IN 46221

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and OES on or before the date it is due.
  - (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- 
- (e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

### **Stratospheric Ozone Protection**

#### **C.18 Compliance with 40 CFR 82 and 326 IAC 22-1**

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- (b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

## SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)] (The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Four (4) General Electric simple cycle, natural gas-fired combustion turbines EU GT1, GT2, GT3 (commenced operation on May 2, 2000), and GT4 (commenced operation on April 24, 2001), rated at 88.4 MW electrical output (924 MMBtu/hr heat input, as defined in 40 CFR 72.2) each at peak load (59 degrees Fahrenheit at 860 feet), exhausting to stacks ID GT-1, GT-2, GT-3, and GT-4. Nitrogen Oxide (NOx) emissions are controlled by dry low NOx combustors.

### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.1.1. General Provisions Relating to NSPS [326 IAC 12] [40 CFR Part 60, Subpart A]

The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to the facility described in this section except when otherwise specified in 40 CFR 50, Subpart GG (Standards of Performance for Stationary Gas Turbines).

#### D.1.2 New Source Performance Standard (NSPS) [326 IAC 12] [40 CFR 60, Subpart GG]

Pursuant to 326 IAC 12 and 40 CFR 60, Subpart GG (Standards of Performance for Stationary Gas Turbines), the Permittee shall:

- (a) limit nitrogen oxides emissions, as required by 40 CFR 60.332, to:

$$\text{STD} = 0.0075 \frac{(14.4)}{Y} + F,$$

where STD = allowable NO<sub>x</sub> emissions (percent by volume at 15 percent oxygen on a dry basis).

Y = manufacturer's rated heat rate at manufacturer's rated load (kilojoules per watt hour) or, actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour.

F = NO<sub>x</sub> emission allowance for fuel-bound nitrogen as defined in paragraph (a)(3) of 40 CFR 60.332.

- (b) limit sulfur dioxide emissions, as required by 40 CFR 60.333, to 0.015 percent by volume at 15 percent oxygen on a dry basis, or use natural gas fuel with a sulfur content less than or equal to 0.8 percent by weight;
- (c) report periods of excess emissions, as required by 40 CFR 60.334(c).

#### D.1.3 PSD Minor Source Limit

- (a) Potential to emit of Nitrogen Oxides (NO<sub>x</sub>), Carbon Oxide (CO), Sulfur Dioxide (SO<sub>2</sub>), VOC, and Particulate Matter (PM and PM<sub>10</sub>) shall be limited to less than 250 tons per year, including periods of turbines startup and shutdown, with compliance determined at the end of each month. Compliance with these limits makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.

- (b) The Permittee shall burn only pipeline natural gas, as defined in the 40 CFR 72.2, in the turbines EU GT1, GT2, GT3, and GT4.

#### **D.1.4 Particulate Matter**

Pursuant to 326 IAC 6-1-2(a), particulate matter (PM) emissions from the turbines EU Turbines GT1, GT2, GT3, and GT4 shall be limited to 0.03 grain/dry standard cubic foot.

#### **D.1.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]**

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and any emission control devices.

### **Compliance Determination Requirements**

#### **D.1.6 NOx Monitoring [40 CFR 75.12(d)] [326 IAC 2-7-5(3)] [326 IAC 3-5-1(d)]**

- (a) Pursuant to 40 CFR 72.9 and 40 CFR 75.12, the Permittee has elected to monitor NOx emissions from the four (4) combustion turbines pursuant to 40 CFR 75, Appendix E, which is used for peaking units. Appendix E includes, but is not limited to, the following requirements:
- (1) Pursuant to 40 CFR 75, Appendix E, The Permittee shall record the time (hour and minute, load (megawatt), natural gas flow rate and heat input rate (using the procedures in Section 2.1.4 of Appendix E) for each hour during which the unit combusts fuel. The Permitted shall calculate the total hourly heat input using equation E-1 of Appendix E and record the Heat input rate for natural gas to the nearest 0.1 million British Thermal units per hour. During partial unit operating hours, heat input must be represented as an hourly rate in million British thermal units per hour, as if the fuel were combusted for the entire hour at that rate in order to ensure proper correlation with the NOx emission rate graph.
  - (2) The Permittee shall use the graph of the baseline correlation results to determine the NOx emission rate (pounds per million British thermal units) corresponding to the heat input rate (million British thermal units per hour) and input this correlations into the data acquisition and handling system for the turbines. The data shall be linearly interpolated to 0.1 million British thermal units per hour heat input rate and 0.01 pounds per million British thermal units.
- (b) To qualify for the mass NOx emissions estimation procedures in accordance with 40 CFR Part 75 Appendix E for peaking units, the Permittee shall annually certify to the OES, IDEM, and U.S. EPA the "peaking units" status for the turbines GT1 - GT4, in accordance with 40 CFR 72.2, as units having an average capacity factor of no more than 10% during the previous three calendar years and no more than 20% in each of those calendar years.
- (c) If any combustion turbine exceeds a capacity factor of sixteen percent (16%) in any given year, or exceeds an average capacity of ten percent (10%) for the previous three (3) years, then the Permittee shall install, certify, and operate NOx Continuous Emissions Monitoring Systems (CEMS) on turbines GT1, GT2, GT3, and GT4 by December 31 of the following calendar year. The NOx CEMS shall meet the minimum requirements of 40 CFR Part 75 and 326 IAC 3-5. If the required CEMS have not been installed and certified by that date, the Permittee shall report the maximum potential NOx emission rate (MER) (as defined in 40 CFR 72.2) for each unit operating hour, starting with the first unit operating hour after the deadline and continuing until the CEMS have been provisionally certified.

- (d) When required to operate the NO<sub>x</sub> CEMS, in instances of NO<sub>x</sub> CEMS downtime, the Permittee shall report the NO<sub>x</sub> mass emissions in accordance with the procedures regulated by 40 CFR Part 75, Appendix D (Optional SO<sub>2</sub> Emissions Data Protocol) for fuel meters requirements, 40 CFR Part 75, Appendix E (Optional NO<sub>x</sub> Emissions Estimation Protocol) for emission rate curve establishment, and Appendix G (Determination of CO<sub>2</sub> Emissions). NO<sub>x</sub> mass emissions reported shall be based on the fuel-and-unit-specific NO<sub>x</sub> emission rates ("load curve") established during the latest stack test.

D.1.7 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

- (a) When monitoring NO<sub>x</sub> emissions in accordance with 40 CFR 75 Appendix E for peaking units, compliance with the NO<sub>x</sub> and CO emissions limitation in Conditions D.1.2 and D.1.3 shall be determined by a performance stack test conducted utilizing Methods as approved by the IDEM Commissioner and OES Administrator. This test on each of the turbines EU GT1, GT2, GT3, and GT4 shall be conducted prior to the earlier of 3,000 unit operating hours or every 5 years from this Part 70 Permit issuance date and following renewals. The stack tests should be conducted in accordance with Section C - Performance Testing, of this permit and 40 CFR 75 Appendix E ("load curve" NO<sub>x</sub> emission rates), and to demonstrate compliance with NO<sub>x</sub> and CO emissions limitations in Conditions D.1.2 and D.1.3.
- (b) When monitoring NO<sub>x</sub> emissions using CEMS in accordance with Condition D.1.6(c), a performance stack test on each of the turbines EU GT1, GT2, GT3, and GT4 shall be conducted prior to the earlier of 3,000 unit operating hours or every 5 years from this Part 70 Permit issuance date and following renewals. The stack tests shall be conducted in accordance with Section C - Performance Testing of this permit, to demonstrate compliance with CO emissions limitation pursuant to Condition D.1.3, utilizing methods as approved by the IDEM Commissioner and OES Administrator.

D.1.8 Sulfur and Nitrogen content [40 CFR 60.334]

- (a) Pursuant to 40 CFR 60, Subpart GG, 60.334(b), the Permittee shall monitor the sulfur content and nitrogen content of the fuel being fired in Emission Units ID GT1, GT2, GT3, and GT4 daily, in accordance with 40 CFR 60.335 (d).
- (b) Alternatively, the Permittee may use the following custom schedule for pipeline natural gas firing allowed by 40 CFR 60.334(b), as approved by the U.S. EPA on March 18, 2003:
  - (1) Monitoring of fuel Nitrogen Content will not be required since pipeline natural gas is the only fuel fired in the turbine;
  - (2) Measurement of Sulfur Content of the pipeline natural gas will be conducted by manual sampling followed by analysis. Sulfur Content will be determined via any of the following ASTM methods: ASTM D1072-90, ASTM D4084-94, ASTM D4468-85, ASTM D5504-94, or ASTM D3246-81. The Applicable ranges of some ASTM methods are not adequate to measure the levels of Sulfur in some fuel gases. Dilution of samples before analysis (with verification of the dilution ratio) may be used, subject to the approval of the EPA Administrator.
  - (3) Initial samples must be collected and analyzed twice a month for six months. If six months of bi-monthly sampling and analysis indicate that Sulfur concentrations are well below the applicable standard with low variability, the sampling frequency will be reduced to quarterly monitoring.

- (4) If six quarters of quarterly sampling and analysis indicated Sulfur concentrations are well below the applicable standard with low variability, the sampling frequency will be reduced to semi-annual monitoring.
- (5) If any analyses indicate noncompliance with the applicable Sulfur limit of 0.8 weight percent in 40 C.F.R. 60.333 (b), samples must be collected and analyzed on a weekly basis while the custom fuel monitoring schedule is re-examined. IPL-Georgetown plant should notify IDEM, OAQ, OES, and the U.S. EPA of the exceedance in accordance with 40 C.F.R. 60.7(c).
- (6) If there is a substantial change in fuel quality, samples must be collected and analyzed on a weekly basis while the custom fuel monitoring schedule is re-examined.
- (7) Records of sample analyses and fuel supply information related to Sulfur content of the fuel will be retained for at least three years and shall be available for inspection upon request.

**D.1.9 Nitrogen Oxides Monitoring Requirement [326 IAC 10-4-4(b)(1)] [326 IAC 10-4-12(b) and (c)] [40CFR 75]**

For the turbines GT1, GT2, GT3, and GT4, the Permittee shall meet the monitoring requirements of 326 IAC 10-4-12(b)(1) through (b)(3) that are applicable to their monitoring systems for the NOx budget units on or before May 1, 2003. The Permittee shall record, report, and quality assure the data from the monitoring systems on and after May 1, 2003 in accordance with 326 IAC 10-4-12 and 40 CFR 75.

**Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

**D.1.10 Record Keeping Requirements**

- (a) To document compliance with Conditions D.1.2, D.1.3, D.1.6, D.1.7, D.1.8, and D.1.9 the Permittee shall maintain records in accordance with (1) through (3) below. Records shall be complete and sufficient to establish compliance with the limits established in Conditions D.1.2 and D.1.3:
  - (1) amount of natural gas combusted per unit (turbine) during each month;
  - (2) all fuel nitrogen content and sulfur content monitoring data;
  - (3) data and results from the most recent stack test;
  - (4) when required to operate the NOx CEMS, all continuous emissions monitoring data.
- (b) All preventive maintenance measures taken.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

**D.1.11 Reporting Requirements**

- (a) A quarterly summary of the information to document compliance with Conditions D.1.2, D.1.3, and D.1.8 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report

submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). A customized reporting form may be used for alternative Nitrogen and Sulfur fuel content monitoring schedule, allowed by the U.S. EPA and described in Condition D.1.8(b).

- (b) Periods of excess emissions shall be reported in accordance with requirements of 40 CFR 60.334(c).

D.1.12 Nitrogen Oxides Budget Permit Application Submittal Requirement [326 IAC 10-4-4(a)(1)] [326 IAC 10-4-9(e)(2)]

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- (a) For NOx budget units GT1, GT2, GT3, and GT4, the NOx authorized account representative shall submit a complete NOx budget permit application in accordance with 326 IAC 10-4-7 at least two hundred seventy (270) days prior to May 31, 2004. This application shall be submitted by the NOx authorized account representative to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

- (b) For NOx budget units GT1, GT2, GT3, and GT4 that commenced operation on or after May 1, 2000, the NOx authorized account representative shall submit a request for NOx allowances in accordance with 326 IAC 10-4-9(e) by September 1 of the calendar year that is one (1) year in advance of the first ozone control period for which the NOx allowance allocation is requested. The NOx authorized account representative shall submit a request each year that the units will require allowances from the new unit set aside until the units are allocated allowances from the existing source pool. These requests shall be submitted by the NOx authorized account representative to:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

## SECTION E

## TITLE IV CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]:

Four (4) General Electric simple cycle, natural gas-fired combustion turbines EU GT1, GT2, GT3 (commenced operation on May 2, 2000), and GT4 (commenced operation on April 24, 2001), rated at 88.4 MW electrical output (924 MMBtu/hr heat input, as defined in 40 CFR 72.2) each at peak load (59 degrees Fahrenheit at 860 feet), exhausting to stacks ID GT-1, GT-2, GT-3, and GT-4. Nitrogen Oxide (NOx) emissions are controlled by dry low NOx combustors.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

### Acid Rain Program

#### E.1 Acid Rain Permit [326 IAC 2-7-5(1)(C)] [326 IAC 21] [40 CFR 72 through 40 CFR 78]

- (a) Pursuant to 326 IAC 21 (Acid Deposition Control), the Permittee shall comply with all provisions of the Acid Rain permits issued for this source, and any other applicable requirements contained in 40 CFR 72 through 40 CFR 78. The Acid Rain permit for this source is attached to this permit as Appendix A, and is incorporated by reference.
- (b) The Permittee shall burn only pipeline natural gas, as defined in the 40 CFR 72.2, in the turbines EU GT1, GT2, GT3, and GT4.

#### E.2 Title IV Emissions Allowances [326 IAC 2-7-5(4)] [326 IAC 21]

Emissions exceeding any allowances that the Permittee lawfully holds under the Title IV Acid Rain Program of the Clean Air Act are prohibited, subject to the following limitations:

- (a) No revision of this permit shall be required for increases in emissions that are authorized by allowances acquired under the Title IV Acid Rain Program, provided that such increases do not require a permit revision under any other applicable requirement.
- (b) No limit shall be placed on the number of allowances held by the Permittee. The Permittee may not use allowances as a defense to noncompliance with any other applicable requirement.
- (c) Any such allowance shall be accounted for according to the procedures established in regulations promulgated under Title IV of the Clean Air Act.



**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
and  
Indianapolis Office of Environmental Services**

**PART 70 OPERATING PERMIT  
CERTIFICATION**

Source Name: IPL Georgetown Substation Generating Plant  
Source Address: 8198 Georgetown Road, Indianapolis, Indiana, 46268  
Mailing Address: Indianapolis Power & Light Company, 3700 S. Harding Street, Indianapolis, Indiana 46217  
Part 70 Permit No.: T097-13705-00352

**This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.**

Please check what document is being certified:

- ? Annual Compliance Certification Letter
- ? Test Result (specify) \_\_\_\_\_
- ? Report (specify) \_\_\_\_\_
- ? Notification (specify) \_\_\_\_\_
- ? Affidavit (specify) \_\_\_\_\_
- ? Other (specify) \_\_\_\_\_

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Telephone:

Date:



**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE BRANCH**

**100 North Senate Avenue  
P.O. Box 6015  
Indianapolis, Indiana 46206-6015  
Phone: 317-233-5674  
Fax: 317-233-5967**

and  
**Indianapolis Office of Environmental Services**

**PART 70 OPERATING PERMIT  
EMERGENCY OCCURRENCE REPORT**

Source Name: IPL Georgetown Substation Generating Plant  
Source Address: 8198 Georgetown Road, Indianapolis, Indiana, 46268  
Mailing Address: Indianapolis Power & Light Company, 3700 S. Harding Street, Indianapolis,  
Indiana 46217  
Part 70 Permit No.: T097-13705-00352

**This form consists of 2 pages**

**Page 1 of 2**

- ? This is an emergency as defined in 326 IAC 2-7-1(12)
- ? The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
  - ? The Permittee must submit notice in writing or by facsimile within two (2) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16.

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:

Control Equipment:

Permit Condition or Operation Limitation in Permit:

Description of the Emergency:

Describe the cause of the Emergency:



If any of the following are not applicable, mark N/A

Page 2 of 2

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency?    Y    N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO <sub>2</sub> , VOC, NO <sub>x</sub> , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Date: \_\_\_\_\_

Telephone: \_\_\_\_\_

A certification is not required for this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE DATA SECTION  
and  
INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES**

**Part 70 Quarterly Report**

Source Name: IPL Georgetown Substation Generating Plant  
Source Address: 8198 Georgetown Road, Indianapolis, Indiana, 46268  
Mailing Address: Indianapolis Power & Light Company, 3700 S. Harding Street, Indianapolis,  
Indiana 46217  
Part 70 Permit No.: T097-13705-00352

Facility: Four (4) General Electric simple cycle, natural gas-fired combustion turbines EU GT1, GT2, GT3 (commenced operation on May 2, 2000), and GT4 (commenced operation on April 24, 2001), rated at 88.4 MW electrical output (924 MMBtu/hr heat input, as defined in 40 CFR 72.2) each at peak load (59 degrees Fahrenheit at 860 feet), exhausting to stacks ID GT-1, GT-2, GT-3, and GT-4. Nitrogen Oxide (NOx) emissions are controlled by dry low NOx combustors.

Parameter: NOx Emissions (tons per month).  
Limits: NOx emissions less than 250 tons per 12 months rolling monthly.

YEAR: \_\_\_\_\_ Quarter: \_\_\_\_\_

**NOx Emissions (ton):**

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

? No deviation occurred in this quarter.  
? Deviation/s occurred in this quarter.  
Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Telephone: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**  
**OFFICE OF AIR QUALITY**  
**COMPLIANCE DATA SECTION**  
*and*  
**INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES**

**Part 70 Quarterly Report**

Source Name: IPL Georgetown Substation Generating Plant  
Source Address: 8198 Georgetown Road, Indianapolis, Indiana, 46268  
Mailing Address: Indianapolis Power & Light Company, 3700 S. Harding Street, Indianapolis, Indiana 46217  
Part 70 Permit No.: T097-13705-00352

Facility: Four (4) General Electric simple cycle, natural gas-fired combustion turbines EU GT1, GT2, GT3 (commenced operation on May 2, 2000), and GT4 (commenced operation on April 24, 2001), rated at 88.4 MW electrical output (92.4 MMBtu/hr heat input, as defined in 40 CFR 72.2) each at peak load (59 degrees Fahrenheit at 860 feet), exhausting to stacks ID GT-1, GT-2, GT-3, and GT-4. Nitrogen Oxide (NOx) emissions are controlled by dry low NOx combustors.

Parameter: Sulfur Content, Nitrogen Content in natural gas.  
Limits: Sulfur Content less than or equal to 0.8 percent by weight.  
Nitrogen - no more than allowable, calculated according to 40 CFR 60.332.

Page 1 of 2

Date	Sulfur (S) Content			Nitrogen (N) Content		
	Month1	Month2	Month3	Month 1	Month 2	Month 3
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						

15						
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Page 2 of 2

16						
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31						

Submitted by: \_\_\_\_\_

Title / Position: \_\_\_\_\_ Telephone: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Attach a signed certification to complete this report.



**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE DATA SECTION**

*and*

**INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES**

**Quarterly Deviation and Compliance Monitoring Report**

Source Name: IPL Georgetown Substation Generating Plant  
Source Address: 8198 Georgetown Road, Indianapolis, Indiana, 46268  
Mailing Address: Indianapolis Power & Light Company, 3700 S. Harding Street, Indianapolis,  
Indiana 46217  
Part 70 Permit No.: T097-13705-00352

Months: \_\_\_\_\_ to \_\_\_\_\_ Year: \_\_\_\_\_

Page 1 of 2

This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

? NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

? THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

**Permit Requirement** (specify permit condition #)

**Date of Deviation:**

**Duration of Deviation:**

**Number of Deviations:**

**Probable Cause of Deviation:**

**Response Steps Taken:**

**Permit Requirement** (specify permit condition #)

**Date of Deviation:**

**Duration of Deviation:**

**Number of Deviations:**

**Probable Cause of Deviation:**

**Response Steps Taken:**

<b>Permit Requirement</b> (specify permit condition #)	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	
<b>Permit Requirement</b> (specify permit condition #)	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	
<b>Permit Requirement</b> (specify permit condition #)	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	

Form Completed By: \_\_\_\_\_

Title/Position: \_\_\_\_\_

Date: \_\_\_\_\_

Telephone: \_\_\_\_\_

Attach a signed certification to complete this report.

# **APPENDIX A**

## **Phase II Acid Rain Permit**

## **Phase II Acid Rain Permit**

### **INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT Office of Air Quality**

**Source Name:** Georgetown Substation Generating Plant  
**Owned By:** DTE Georgetown, LLC and  
Indianapolis Power and Light Company  
**Source Location:** 8198 Georgetown Road,  
Indianapolis, Indiana 46268  
**Operated By:** Indianapolis Power and Light Company  
**County:** Marion  
**ORIS Code:** 7759

**This permit is issued to the above mentioned company under the provisions of 326 Indiana Administrative Code (IAC) 21 and 40 Code of Federal Regulations (CFR) 72, 40 CFR 75 through 40 CFR 78, with conditions listed on the attached pages.**

Operation Permit No.: AR 097-11116-0000352	
Issued by:  Janet G. McCabe, Assistant Commissioner Office of Air Management	Issuance Date: April 4, 2000  Expiration Date: April 9, 2005

Operation Permit No.: AR 097-12167-00352		Pages affected: Cover, 2, and 3
Issued by  Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date: March 20, 2001  Expiration Date: April 9, 2005	

## Section E Title IV Acid Rain

Facility: four (4) General Electric simple cycle combustion turbine generators (GT1, GT2, GT3, and GT4) each rated at 88.4 Megawatts (88.4 MW) at peak load. Nitrogen oxide (NO<sub>x</sub>) emissions are controlled by dry low NO<sub>x</sub> combustors. The emissions shall be emitted through stacks designated GT-1, GT-2, GT-3, and GT-4.

### E.1.1 Statement of Basis

Statutory and Regulatory Authorities: In accordance with IC 13-17-3-4, IC 13-17-3-11, IC 13-17-8-1, and IC 13-17-8-2 as well as Title IV - Acid Deposition Control - Section 400 and Title V – Permits - Section 500 of the Clean Air Act, the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) issues this permit pursuant to 326 IAC 2 and 326 IAC 21 (incorporates by reference 40 CFR 72 through 78).

### E.1.2 Standard Permit Requirements [326 IAC 21]

- (a) The designated representative has submitted a complete Acid Rain permit application in accordance with the deadlines in 40 CFR 72.30.
- (b) The owners and operators of each affected source and each affected unit shall operate the unit in compliance with this Acid Rain permit.

### E.1.3 Monitoring Requirements [326 IAC 21]

- (a) The owners and operators and, to the extent applicable, the designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR 75.
- (b) The emissions measurements shall be recorded and reported in accordance with 40 CFR 75 to determine compliance by each unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
- (c) The requirements of 40 CFR 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or emissions characteristics at the unit required by the Clean Air Act and any provisions of the operating permit for the source.

### E.1.4 Sulfur Dioxide Requirements [326 IAC 21]

- (a) The owners and operators of each source and each affected unit at the source shall:
  - (1) Hold allowances, as of the allowance transfer deadline (as defined in 40 CFR 72.2), in the unit's compliance subaccount, after deductions under 40 CFR 73.34(c), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and
  - (2) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
- (b) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for

sulfur dioxide shall constitute a separate violation of the Clean Air Act.

- (c) An affected unit shall be subject to the requirements under paragraph (a) of the sulfur dioxide requirements as follows:
  - (1) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or
  - (2) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR 75, an affected unit under 40 CFR 72.6(a)(3).
- (d) Allowances shall be transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (e) These units were not allocated allowances by United States Environmental Protection Agency (U.S. EPA) under 40 CFR part 73. However, these units must still comply with the requirement to hold allowances to account for sulfur dioxide emissions under E.1.4(a) and 326 IAC 21.
- (f) An allowance allocated by the U.S. EPA under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, the Acid Rain portion of an operating permit, or the written exemption under 40 CFR 72.7 and 72.8 and 326 IAC 21, and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization. Pursuant to 40 CFR 72.9(c)(7), allowances allocated by U.S. EPA do not constitute a property right.
- (g) These units have no sulfur dioxide (SO<sub>2</sub>) allowance allocations from U.S. EPA. The allowances shall be obtained from other units to account for the SO<sub>2</sub> emissions from these units as required by 40 CFR 72.9(c).

E.1.5 Excess Emissions Requirements [40 CFR 77] [326 IAC 21]

- (a) The designated representative of an affected unit that has excess emissions of sulfur dioxide in any calendar year shall submit a proposed offset plan to U.S. EPA and IDEM, OAQ as required under 40 CFR 77 and 326 IAC 21.
- (b) The designated representative shall submit such required information to:

Indiana Department of Environmental Management  
Air Compliance Section I, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

and

Indianapolis, Environmental Resources Management Division  
Administrative Building  
2700 South Belmont Avenue  
Indianapolis, Indiana 46221-2097

and

Ms. Cecilia Mijares  
Air and Radiation Division  
U.S. Environmental Protection Agency, Region V  
77 West Jackson Boulevard  
Chicago, IL 60604-3590

and

U.S. Environmental Protection Agency  
Acid Rain Program (6204J)  
Attn.: Annual Reconciliation  
401 M Street, SW  
Washington, DC 20460

- (c) The owners and operators of an affected unit that has excess emissions in any calendar year shall:
  - (1) Pay to U.S. EPA without demand the penalty required, and pay to U.S. EPA upon demand the interest on that penalty, as required by 40 CFR 77 and 326 IAC 21; and
  - (2) Comply with the terms of an approved sulfur dioxide offset plan, as required by 40 CFR 77 and 326 IAC 21.

E.1.6 Record Keeping and Reporting Requirements [326 IAC 21]

- (a) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep each of the following documents for a period of 5 years, as required by 40 CFR 72.9(f), from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by U.S. EPA or IDEM, OAQ:
  - (1) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
  - (2) All emissions monitoring information, in accordance with 40 CFR 75;
  - (3) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and
  - (4) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
- (b) The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain

Program, including those under 40 CFR 72.90 subpart I, 40 CFR 75, and 326 IAC 21. Submit required information to the appropriate authority(ies) as specified in 40 CFR 72.90 subpart I and 40 CFR 75.

E.1.7 Submissions [326 IAC 21]

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- (a) The designated representative shall submit a certificate of representation and any superseding certificate of representation to U.S. EPA in accordance with 40 CFR 72 and 326 IAC 21.

- (b) The designated representative shall submit such required information to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

and

Indianapolis, Environmental Resources Management Division  
Administrative Building  
2700 South Belmont Avenue  
Indianapolis, Indiana 46221-2097

and

U.S. Environmental Protection Agency  
Acid Rain Program (6204J)  
Attn.: Designated Representative  
401 M Street, SW  
Washington, DC 20460

- (c) Each such submission under the Acid Rain Program shall be submitted, signed and certified by the designated representative for all sources on behalf of which the submission is made.
- (d) In each submission under the Acid Rain Program, the designated representative shall certify, by his or her signature:
- (1) The following statement, which shall be included verbatim in the submission: "I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made." and
  - (2) The following statement which shall be included verbatim in the submission: "I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."



- (e) The designated representative of a source shall notify each owner and operator of the source and of an affected unit at the source:
  - (1) By the date of submission, of any Acid Rain Program submissions by the designated representative,
  - (2) Within 10 business days of receipt of any written determination by U.S. EPA or IDEM, OAQ, and
  - (3) Provided that the submission or determination covers the source or the unit.
- (f) The designated representative of a source shall provide each owner and operator of an affected unit at the source a copy of any submission or determination under condition (d) of this section, unless the owner or operator expressly waives the right to receive a copy.

**E.1.8 Severability [326 IAC 21]**

Invalidation of the Acid Rain portion of an operating permit does not affect the continuing validity of the rest of the operating permit, nor shall invalidation of any other portion of the operating permit affect the continuing validity of the Acid Rain portion of the permit [40 CFR 72.72(b), 326 IAC 21, and 326 IAC 2-7-5(5)].

**E.1.9 Liability [326 IAC 21]**

- (a) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, an Acid Rain permit, an Acid Rain portion of an operation permit, or a written exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement by U.S. EPA pursuant to section 113(c) of the Clean Air Act and IDEM pursuant to 326 IAC 21 and IC 13-30-3.
- (b) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Clean Air Act and 18 U.S.C. 1001 and IDEM pursuant to 326 IAC 21 and IC 13-30-6-2.
- (c) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
- (d) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.
- (e) Any provision of the Acid Rain Program that applies to an affected source, including a provision applicable to the designated representative of an affected source, shall also apply to the owners and operators of such source and of the affected units at the source.
- (f) Any provision of the Acid Rain Program that applies to an affected unit, including a provision applicable to the designated representative of an affected unit, shall also apply to the owners and operators of such unit. Except as provided under 40 CFR 72.44 (Phase II repowering extension plans) and 40 CFR 76.11 (NO<sub>x</sub> averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR 75, including 40 CFR 75.16, 75.17, and 75.18, the owners and operators and the designated representative of one affected unit shall not be liable for any violation by any other affected unit of which they are not owners or operators or the designated representative and that is

located at a source of which they are not owners or operators or the designated representative.

- (g) Each violation of a provision of 40 CFR Parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Clean Air Act.

#### E.1.10 Effect on Other Authorities [326 IAC 21]

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No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, an Acid Rain portion of an operation permit, or a written exemption under 40 CFR 72.7 or 72.8 shall be construed as:

- (a) Except as expressly provided in Title IV of the Clean Air Act (42 USC 7651 to 7651(o)), exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the Clean Air Act, including the provisions of Title I of the Clean Air Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;
- (b) Limiting the number of allowances a unit can hold; provided, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the Clean Air Act;
- (c) Requiring a change of any kind in any state law regulating electric utility rates and charges, affecting any state law regarding such state regulation, or limiting such state regulation, including any prudence review requirements under such state law;
- (d) Modifying the Federal Power Act (16 USC 791a et seq.) or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
- (e) Interfering with or impairing any program for competitive bidding for power supply in a state in which such a program is established.

**Indiana Department of Environmental Management  
Office of Air Management  
and  
Indianapolis Office of Environmental Services**

**Addendum to the  
Technical Support Document (TSD) for a Part 70 Operating Permit**

<b>Source Name:</b>	<b>IPL Georgetown Substation Generating Plant</b>
<b>Source Location:</b>	<b>8198 Georgetown Road, Indianapolis, Indiana, 46268</b>
<b>County:</b>	<b>Marion</b>
<b>Permit No.:</b>	<b>097-13705-00352</b>
<b>SIC Code:</b>	<b>4911</b>
<b>Permit Reviewer:</b>	<b>Boris Gorlin</b>

On September 6, 2002, the Indianapolis Office of Environmental Services (OES) had a notice published in the Indianapolis Star, Indianapolis, Indiana, stating that the IPL Georgetown Substation Generating Plant had applied for a Part 70 Operating Permit to operate a natural gas turbines power generating plant. The notice also stated that the OES proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

The TSD will remain as it originally appeared when published. OAQ and OES prefer that the Technical Support Document reflect the permit that was on public notice. Changes to the permit or technical support material that occur after the permit has been published are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision (underlined language has been added, the language with a line through it has been deleted). The Table of Contents and numbering have been revised, as needed.

Written comments were received from the **Applicant (IPL Georgetown Substation Generating Plant)** on October 3, 2002, and **Mr. Stephen Loeschner** of Fort Wayne, Indiana, on October 2, 2002. These comments and OES responses, including changes to the permit, are as follows.

**Comments from the Applicant**

**Comment 1:**

The second sentence of the opening paragraph contains "... conditions A.1 through A.3 is descriptive ...". There is no Section A.3 listed in the permit. This should be revised to "... conditions A.1 and A.2 is descriptive ..."

The Mailing Address (operator) should be: Indianapolis Power & Light Company, 3700 S. Harding Street, Indianapolis, Indiana 46217.

The "Responsible Official" for Georgetown should be **Vincent Zehnle, Team Leader**. Vincent is the Designated Representative for the Acid Rain and NOX Trading Program(s) for Georgetown and is Supervisor for the overall operations at the Georgetown Facility.

The Condition A.1 Ownership should read: "DTE Georgetown, LLC and Indianapolis Power & Light Company". IPL owns GT1 and DTE owns GT2 through 4. However, all four units are operated by IPL.

**Response 1:**

The following changes were made to the Section A. Source Summary and the reporting forms:

## SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) and Indianapolis Office of Environmental Services (OES). The information describing the source contained in conditions A.1 through A.3 and A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

### A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates a stationary electric utility generating station.

Responsible Official: ~~David Murphy, Environmental Engineer~~ **Vincent Zehnle, Team Leader**  
Source Address: 8198 Georgetown Road, Indianapolis, Indiana, 46268  
Mailing Address (operator): ~~IPL, 1230 West Morris Street, Indianapolis, Indiana 46224~~  
**Indianapolis Power & Light Company, 3700 S. Harding Street, Indianapolis, Indiana 46217**  
Owner: DTE Georgetown, LLC and Indianapolis Power and Light Company

Mailing Address (owner): P.O. Box 8614, 425 S. Main Street, Suite 201, Ann Arbor, MI 48107  
Source Telephone: (317) 788-5230  
SIC Code: 4911  
County Location: Marion  
Source Location Status: Attainment for all criteria pollutants  
Source Status: Part 70 Permit Program  
Minor Source under PSD Rules; one of 28 Source Categories  
Minor Source, Section 112 of the Clean Air Act

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### A.4 3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source does not currently have any insignificant activities, as defined in 326 IAC 2-7-1(21) that have applicable requirements.

### A.5 4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

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## PART 70 OPERATING PERMIT CERTIFICATION

Source Name: IPL Georgetown Substation Generating Plant  
Source Address: 8198 Georgetown Road, Indianapolis, Indiana, 46268  
Mailing Address: ~~IPL, 1230 West Morris Street, Indianapolis, Indiana 46224~~ **Indianapolis Power & Light Company, 3700 S. Harding Street, Indianapolis, Indiana 46217**  
Part 70 Permit No.: T097-13705-00352

## PART 70 OPERATING PERMIT EMERGENCY OCCURRENCE REPORT

Source Name: IPL Georgetown Substation Generating Plant

IPL Georgetown Substation Generating Plant  
Location: Indianapolis, Indiana  
Permit Reviewer: Boris Gorlin

TSD Addendum

Page 3 of 18  
T097-13705-00352  
Plt ID: 097-00352

Source Address: 8198 Georgetown Road, Indianapolis, Indiana, 46268  
Mailing Address: ~~IPL, 1230 West Morris Street, Indianapolis, Indiana 46224~~ **Indianapolis Power & Light Company, 3700 S. Harding Street, Indianapolis, Indiana 46217**  
Part 70 Permit No.: T097-13705-00352

### Part 70 Quarterly Reports

Source Name: IPL Georgetown Substation Generating Plant  
Source Address: 8198 Georgetown Road, Indianapolis, Indiana, 46268  
Mailing Address: ~~IPL, 1230 West Morris Street, Indianapolis, Indiana 46224~~ **Indianapolis Power & Light Company, 3700 S. Harding Street, Indianapolis, Indiana 46217**  
Part 70 Permit No.: T097-13705-00352

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### PART 70 OPERATING PERMIT QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: IPL Georgetown Substation Generating Plant  
Source Address: 8198 Georgetown Road, Indianapolis, Indiana, 46268  
Mailing Address: ~~IPL, 1230 West Morris Street, Indianapolis, Indiana 46224~~ **Indianapolis Power & Light Company, 3700 S. Harding Street, Indianapolis, Indiana 46217**  
Part 70 Permit No.: T097-13705-00352

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### Comment 2:

#### Section B.11 Preventive Maintenance Plan

IPL needs 180 days to prepare and implement the Preventive Maintenance Plans (PMPs). 90 days is not enough time.

#### Section C.8 Compliance Monitoring

IPL needs 180 days to implement all the monitoring and record keeping requirements proposed to be imposed. 90 days is not enough time.

#### Section C.13 Compliance Response Plan – Preparation, Implementation, Records, and Reports

IPL needs 180 days to implement all the monitoring and record keeping requirements proposed to be imposed. 90 days is not enough time.

### Response 2:

The Construction Permit Modification issued in July of 2000 included conditions requesting the source to prepare and maintain the PMP and CRP. The Part 70 Permit monitoring and record keeping requirements also are essentially the same as in the initial Construction Permit.

This source has been in operation since May of 2000, therefore, there has been enough time to prepare the PMP and CRP.

No changes were made to Conditions B.11 and C.8.

Upon further review, OAQ and OES have made the following changes to the Condition C.13 in the final Part 70 permit (changes are bolded for emphasis):

C.13 Compliance Response Plan - Preparation, Implementation, Records, and Reports  
[326 IAC 2-7-5] [326 IAC 2-7-6]

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- (a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. **If a Permittee is required to have an Operation, Maintenance and Monitoring (OMM) Plan or Parametric Monitoring Plan and Start-up, Shutdown, and Malfunction (SSM) Plan under 40 CFR 63, such plans shall be deemed to satisfy the requirements for a CRP for those compliance monitoring conditions.** A CRP shall be submitted to IDEM, OAQ, and OES upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:
- (1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.
  - (2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan **or Operation, Maintenance and Monitoring (OMM) Plan or Parametric Monitoring Plan and Start-up, Shutdown, and Malfunction (SSM) Plan** and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan **or Operation, Maintenance and Monitoring (OMM) Plan or Parametric Monitoring Plan and Start-up, Shutdown, and Malfunction (SSM) Plan** to include such response steps taken.

**The OMM Plan or Parametric Monitoring and SSM Plan shall be submitted within the time frames specified by the applicable 40 CFR 63 requirement.**

- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:
- (1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan **or Operation, Maintenance and Monitoring (OMM) Plan or Parametric Monitoring Plan and Start-up, Shutdown, and Malfunction (SSM) Plan**; or
  - (2) If none of the reasonable response steps listed in the Compliance Response Plan **or Operation, Maintenance and Monitoring (OMM) Plan or Parametric Monitoring Plan and Start-up, Shutdown, and Malfunction (SSM) Plan** is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.
  - (3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, ~~the IDEM, OAQ shall be promptly notified~~ **and it will be 10 days or more until the unit or device will be shut down, then the permittee shall promptly notify the IDEM, OAQ** of the expected date of the shut down. **The notification shall also include** the status of the applicable compliance monitoring parameter with respect to normal, and the results of the **response** actions taken up to the time of notification.

- (4) Failure to take reasonable response steps shall ~~constitute~~ **be considered a violation of deviation from** the permit.
- (c) The Permittee is not required to take any further response steps for any of the following reasons:
- (1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.
  - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for a minor permit modification to the permit, and such request has not been denied.
  - (3) An automatic measurement was taken when the process was not operating.
  - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.
- (e) The Permittee shall record all instances when response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

**Comment 3:**

Section A.2 Emission Units and Pollution Control Equipment Summary

The heat input capacity is listed as 301.8 MMBtu/hr. This is incorrect. The correct heat input capacity for each unit is 924 MMBtu/hr.

**Response 3:**

The initial Construction Permit listed the turbines individual maximum heat input capacity at 924 MMBtu/hr. During the processing of the Part 70 Permit, the maximum heat input capacity was erroneously calculated as 301.8 MMBtu/hr, using the Megawatts to MMBtu/hr conversion factor and the turbines electric capacity of 88.4 MW. However, the 88.4 MW is the turbine's electrical capacity output, not reflecting the maximum heat input.

For the purposes of this Part 70 Permit, and to be consistent with the Construction Permit, the manufacturer's specification of the turbines GT1 - GT4 maximum heat input capacity of 924 MMBtu/hr must be used.

The following changes were made to the permit:

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)]  
[326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

Four (4) General Electric simple cycle, natural gas-fired combustion turbines EU GT1, GT2, GT3 (commenced operation on May 2, 2000), and GT4 (commenced operation on April 24, 2001), rated at 88.4 MW **electrical output** (~~304.8~~ **924** MMBtu/hr **heat input, as defined in 40 CFR 72.2**) each at peak load (59 degrees Fahrenheit at 860 feet), exhausting to stacks ID GT-1, GT-2, GT-3, and GT-4. Nitrogen Oxide (NOx) emissions are controlled by dry low NOx combustors.

**SECTION D.1 FACILITY OPERATION CONDITIONS**

Facility Description [326 IAC 2-7-5(15)] (The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

(a) — Four (4) General Electric simple cycle, natural gas-fired combustion turbines EU GT1, GT2, GT3 (commenced operation on May 2, 2000), and GT4 (commenced operation on April 24, 2001), rated at 88.4 MW **electrical output** (~~304.8~~ **924** MMBtu/hr **heat input, as defined in 40 CFR 72.2**) each at peak load (59 degrees Fahrenheit at 860 feet), exhausting to stacks ID GT-1, GT-2, GT-3, and GT-4. Nitrogen Oxide (NOx) emissions are controlled by dry low NOx combustors.

Respective changes were made to the Section E (Title IV Conditions) facility Description box.

**Comment 4:**

The actual limit that should govern the maximum amount of operation for the four gas turbines is the 250 tons per year of NOx. The first paragraph of Section D.1.3 of the permit limits the combined input of natural gas to the gas turbines to less than 1,819 million standard cubic feet per 12 consecutive month period. It would be best to remove this limit, but if this limit must stay in the permit, this number is incorrectly calculated, and should be 5,570 million standard cubic feet per 12 consecutive month period. This fuel consumption limit was calculated based on worse case emissions, but the facility is already using a much more accurate way to monitor NOx emissions, and thus this fuel usage limit should be completely eliminated. The elimination of the fuel throughput limitation would allow the source to demonstrate compliance with the 250 tons of NOx limit via the more accurate 40 CFR 75 Appendix E procedures, as the source has done for the past 3 plus years.

The second paragraph of Section D.1.3 of the permit appears to reference 40 CFR Part 75, section 75.19 (Optional SO2, NOx, and CO2 emissions calculation for low mass emission units) as the compliance method for the source. It does this by including the sentence that reads "To qualify for this procedure, the source must demonstrate that the NOx actual emissions are no more than 50 tons, and the SO2 emissions are no more than 25 tons per unit (Gas Turbines GT-1, GT-2, GT-3, and GT-4) annually". These requirements only apply to units that voluntarily report using the Low Mass Emissions methodology of 40 CFR 75, Section 75.19. This source does not report NOx mass emissions using Section 75.19, but instead reports NOx mass emissions using the more accurate NOx emissions collected using the procedures under 40 CFR 75 Appendix E. The above quoted sentence needs to be removed from this paragraph, and the first sentence of this paragraph should be changed by adding the words "Appendix E" immediately following the words "40 CFR Part 75".

These two changes will clarify that the source is limited to 250 tons per year of NOx, and that the NOx emissions will be calculated using the data developed from 40 CFR 75 Appendix E.

**Response 4:**



The initial Construction Permit CP-097-00352, issued on September 17, 1999, Condition 10 limited the combined input of natural gas in the gas turbines GT1, GT2, GT3; later, in July of 2000, the turbine GT4 was added by the Minor Source Modification 097-12335-00352, with total (four turbines) fuel consumption limit of 5,570 millions cubic feet per year. During the Part 70 permit processing, the individual turbines maximum heat input was erroneously calculated at 301.8 MMBtu/hr, instead of 924 MMBtu/hr (see Response to Comment 3), and fuel consumption limit at 1,819 MMcf/yr of natural gas. If this limit stays, it should be corrected back to 5,570 MMcf/yr.

The IPL Georgetown Substation is an affected source, subject to the Acid Rain Program Phase II, (Acid Rain Permit AR 097-11116-00352), the turbines GT1-GT4 were certified by the U.S. EPA as "peaking units", and, in accordance with 40 CFR 75, Appendix E, are allowed to report mass NO<sub>x</sub> emissions, based not on the manufacturer specified "maximum emission rate" (which was used in the Construction Permit to calculate fuel consumption limit), but on the "load curve" fuel-to-unit-specific emission rates, established during the initial stack test. This method of compliance determination and reporting accounts for actual emission rates correlated to particular load levels.

Relation between fuel consumption and NO<sub>x</sub> emission is not linear, because the NO<sub>x</sub> emission rates are changing with the turbine load. The existing monitoring and reporting system, allowed by the Acid Rain Program provisions for "peaking units" (40 CFR 75, Appendix E), based on the "load curve" emission rates and continuous parametric monitoring, allows the source with "peaking units" to demonstrate compliance without the fuel consumption limit.

The source has been using a computerized monitoring system (PEM - predictive emissions monitoring), approved by the U.S. EPA. This system continuously monitors fuel consumption and records the turbines load and heat input. This kind of monitoring is allowed by the 40 CFR 75, Appendix E, in lieu of CEMs, for the certified "peaking units" (according to 40 CFR 72.2 definition - a unit that has an average capacity factor of no more than 10% during the previous three calendar years and no more than 20% in each of those calendar years).

However, at the 20% maximum annual operation time (by definition of a "peaking unit", according to 40 CFR 72.2) the NO<sub>x</sub> potential emissions are 277 tons per year, calculated at the "worst case" emission rate supplied by the turbines manufacturer, which exceeds the minor PSD limits of less than 250 tons per year.

The rule 326 IAC 3-5-1(d) authorizes IDEM, OAQ, and OES to require the emissions monitoring from a source to ensure compliance with the emissions limits established in the permits issued pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration). In addition, under the same rule, the IDEM, OAQ, and OES are authorized to require emissions monitoring to ensure compliance with the permit requirements.

To ensure compliance with the minor PSD limit of less than 250 tons per year of NO<sub>x</sub>, the following requirement is added: if any combustion turbine exceeds a capacity factor of sixteen percent (16%) in any given year, which is equivalent to 221 tons per year of NO<sub>x</sub> emissions at the maximum (manufacturer specified) emission rate, or exceeds an average capacity of ten percent (10%) for the previous three (3) years, then the Permittee shall install, certify, and operate NO<sub>x</sub> Continuous Emissions Monitoring Systems (CEMS) on turbines GT1 - GT4 by December 31 of the following calendar year.

The following changes were made to the permit:

**C.9 Maintenance of Continuous Emission Monitoring Equipment [326 IAC 2-7-5(3)(A)]**

- (a) When required by Section D of this Permit, the Permittee shall install, calibrate, maintain, and operate all necessary continuous emission monitoring systems (CEMS) and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

- (b) **All continuous emission monitoring systems shall meet all applicable performance specifications of 40 CFR 60 or any other performance specification, and are subject to monitor system certification requirements pursuant to 326 IAC 3-5-3.**
- (c) **In the event that a breakdown of a continuous emission monitoring system occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.**
- (d) **When required to operate the CEMS, the Permittee shall comply with the requirements to operate a continuous emission monitoring system pursuant to 326 IAC 3-5.**

The consequent Section C Conditions were renumbered, the respective changes were made in the Table of Contents.

#### D.1.3 PSD Minor Source Limit

- (a) Pursuant to CP-097-9900352-00352, issued on September 17, 1999, the combined input of natural gas to the gas turbines GT1, GT2, GT3, and GT4 shall be less than 1,819 5,570 million standard cubic feet per 12 consecutive month period, rolled on a monthly basis. This limit restricts the Potential to emit of Nitrogen Oxides (NOx), Carbon Oxide (CO), Sulfur Dioxide (SO<sub>2</sub>), VOC, and Particulate Matter (PM and PM10) to less than 250 tons per year, with compliance determined at the end of each month. Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.

Pursuant to CP-097-9900352-00352, issued on September 17, 1999, the combined input of natural gas to the gas turbines GT1, GT2, GT3, and GT4 shall be less than 1,819 million standard cubic feet per 12 consecutive month period, rolled on a monthly basis. This limit restricts the potential to emit of Nitrogen Oxides (NOx), Carbon Oxide (CO), Sulfur Dioxide (SO<sub>2</sub>), VOC, and Particulate Matter (PM and PM10) to less than 250 tons per year, with compliance determined at the end of each month. Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable. ———

The Permittee may report the NOx mass emissions in accordance with the procedures regulated by 40 CFR Part 75, based on the fuel and unit specific NOx emission rates ("load curve") established during the latest stack test. To qualify for this procedure, the source must demonstrate that the NOx actual emissions are no more than 50 tons, and SO<sub>2</sub> emissions are no more than 25 tons per unit (Gas Turbines GT-1, GT-2, GT-3, and GT-4) annually. These recordkeeping and reporting procedures require an emissions reporting system fully certified by the EPA, IDEM, and OES.

- (a) **Potential to emit of Nitrogen Oxides (NOx), Carbon Oxide (CO), Sulfur Dioxide (SO<sub>2</sub>), VOC, and Particulate Matter (PM and PM10) shall be limited to less than 250 tons per year, including periods of turbines startup and shutdown, with compliance determined at the end of each month. Compliance with these limits makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.**
- (b) **The Permittee shall burn only pipeline natural gas, as defined in the 40 CFR 72.2, in the turbines EU GT1, GT2, GT3, and GT4.**

#### D.1.6 NSPS Compliance Provisions [40 CFR 60, Subpart GG]

Pursuant to 40 CFR 60, Subpart GG, the Permittee shall continuously monitor and record the fuel consumption.

**D.1.6 NOx Monitoring [40 CFR 75.12(d)] [326 IAC 2-7-5(3)] [326 IAC 3-5-1(d)]**

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- (a) Pursuant to 40 CFR 72.9 and 40 CFR 75.12, the Permittee has elected to monitor NOx emissions from the four (4) combustion turbines pursuant to 40 CFR 75, Appendix E, which is used for peaking units. Appendix E includes, but is not limited to, the following requirements:
- (1) Pursuant to 40 CFR 75, Appendix E, The Permittee shall record the time (hour and minute, load (megawatt), natural gas flow rate and heat input rate (using the procedures in Section 2.1.4 of Appendix E) for each hour during which the unit combusts fuel. The Permittee shall calculate the total hourly heat input using equation E-1 of Appendix E and record the Heat input rate for natural gas to the nearest 0.1 million British Thermal units per hour. During partial unit operating hours, heat input must be represented as an hourly rate in million British thermal units per hour, as if the fuel were combusted for the entire hour at that rate in order to ensure proper correlation with the NOx emission rate graph.
  - (2) The Permittee shall use the graph of the baseline correlation results to determine the NOx emission rate (pounds per million British thermal units) corresponding to the heat input rate (million British thermal units per hour) and input this correlations into the data acquisition and handling system for the turbines. The data shall be linearly interpolated to 0.1 million British thermal units per hour heat input rate and 0.01 pounds per million British thermal units.
- (b) To qualify for the mass NOx emissions estimation procedures in accordance with 40 CFR Part 75 Appendix E for peaking units, the Permittee shall annually certify to the OES, IDEM, and U.S. EPA the "peaking units" status for the turbines GT1 - GT4, in accordance with 40 CFR 72.2, as units having an average capacity factor of no more than 10% during the previous three calendar years and no more than 20% in each of those calendar years.
- (c) If any combustion turbine exceeds a capacity factor of sixteen percent (16%) in any given year, or exceeds an average capacity of ten percent (10%) for the previous three (3) years, then the Permittee shall install, certify, and operate NOx Continuous Emissions Monitoring Systems (CEMS) on turbines GT1, GT2, GT3, and GT4 by December 31 of the following calendar year. The NOx CEMS shall meet the minimum requirements of 40 CFR Part 75 and 326 IAC 3-5. If the required CEMS have not been installed and certified by that date, the Permittee shall report the maximum potential NOx emission rate (MER) (as defined in 40 CFR 72.2) for each unit operating hour, starting with the first unit operating hour after the deadline and continuing until the CEMS have been provisionally certified.
- (d) When required to operate the NOx CEMS, in instances of NOx CEMS downtime, the Permittee shall report the NOx mass emissions in accordance with the procedures regulated by 40 CFR Part 75, Appendix D (Optional SO<sub>2</sub> Emissions Data Protocol) for fuel meters requirements, 40 CFR Part 75, Appendix E (Optional NOx Emissions Estimation Protocol) for emission rate curve establishment, and Appendix G (Determination of CO<sub>2</sub> Emissions). NOx mass emissions reported shall be based on the fuel-and-unit-specific NOx emission rates ("load curve") established during the latest stack test.
- .....

**Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

**D.1.10 Record Keeping Requirements**

- (b) To document compliance with Conditions D.1.2, D.1.3, **D.1.6, D.1.7, D.1.8, and D.1.9** the Permittee shall maintain records in accordance with (1) through (3) below. Records shall be complete and sufficient to establish compliance with the limits established in Conditions D.1.2 and D.1.3:
- ~~(1) Data and results from the most recent stack test; and~~
- ~~(2) All fuel nitrogen content and sulfur content monitoring data.~~
- ~~(3) Records of fuel usage.~~
- (1) **amount of natural gas combusted per unit (turbine) during each month;**
- (2) **all fuel nitrogen content and sulfur content monitoring data;**
- (3) **data and results from the most recent stack test;**
- (4) **when required to operate the NOx CEMS, all continuous emissions monitoring data.**
- (b) All preventive maintenance measures taken.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

**Part 70 Quarterly Report**

.....

Parameter: ~~Fuel Consumption~~, NOx Emissions (tons per month).

Parameter: ~~Fuel Consumption~~, NOx Emissions (tons per month).

Limits: ~~Natural Gas consumption: 1,819 MMdscf/yr per 12 months rolling average;~~ NOx emissions less than 250 tons per 12 months rolling monthly.

YEAR: \_\_\_\_\_

Quarter: \_\_\_\_\_

Fuel Consumption (MMdscf):

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

NOx Emissions (ton):

.....

**Comment 5:**

Condition D.1.7 Testing Requirements

The testing requirements for these combustion turbines is too onerous. There is no reason to do emissions tests every two (2) years. We would propose repeating the test every 3000 hours of operation or every five (5) years, whichever comes first, as required by 40 CFR Part 75, Appendix E for peaking units.

**Response 5:**

The IPL Georgetown Substation Generating Plant is a peaking power generating source, its turbines have been certified by the U.S. EPA as "peaking units". Pursuant to 40 CFR 75 Appendix E, 2.2 (Periodic NOx Emission Rate Testing), "the source must retest the NOx emission rate of the gas-fired peaking unit... prior to the earlier of 3,000 unit operating hours or the 5 year anniversary and renewal of this operating permit". **In case of using CEMS for NOx emissions monitoring, in accordance with revised Condition D.1.6(c) (see Response 4)** CEMS for NOx emissions monitoring, with proper CEMS calibration and certification procedures, periodic stack testing for NOx **will not be** necessary, and the source shall stack test for CO only.

The following changes were made to the Permit:

D.1.7 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

~~Within a two (2) year period from the most recent stack test, compliance with the NOx and CO emissions limitation in Conditions D.1.2 and D.1.3 shall be determined by a performance stack test conducted utilizing Methods as approved by the IDEM Commissioner and OES Administrator. This test shall be repeated at least once every two (2) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C-Performance Testing.~~

- (b) **When monitoring NOx emissions in accordance with 40 CFR 75 Appendix E for peaking units, compliance with the NOx and CO emissions limitation in Conditions D.1.2 and D.1.3 shall be determined by a performance stack test conducted utilizing Methods as approved by the IDEM Commissioner and OES Administrator. This test on each of the turbines EU GT1, GT2, GT3, and GT4 shall be conducted prior to the earlier of 3,000 unit operating hours or every 5 years from this Part 70 Permit issuance date and following renewals. The stack tests should be conducted in accordance with Section C - Performance Testing, of this permit and 40 CFR 75 Appendix E ("load curve" NOx emission rates), and to demonstrate compliance with NOx and CO emissions limitations in Conditions D.1.2 and D.1.3.**
- (c) **When monitoring NOx emissions using CEMS in accordance with Condition D.1.6(c), a performance stack test on each of the turbines EU GT1, GT2, GT3, and GT4 shall be conducted prior to the earlier of 3,000 unit operating hours or every 5 years from this Part 70 Permit issuance date and following renewals. The stack tests shall be conducted in accordance with Section C - Performance Testing of this permit, to demonstrate compliance with CO emissions limitation pursuant to Condition D.1.3, utilizing methods as approved by the IDEM Commissioner and OES Administrator.**

**Comment 6:**

Section D.1.5 Preventive Maintenance Plan

IPL requests that this section be rewritten to delete the phrase "*this facility and*". Deletion of this phrase will bring D.1.5 in line with Section B11 that makes it clear that a Preventive Maintenance Plan is required for "*emission control devices*". Section D.1.5, as written, could incorrectly be read that a Preventive Maintenance Plan is required "*for this facility*" rather than for any emission control devices at this facility.

**Response 6:**

Pursuant to 326 IAC 2-7-5(13)(A), the source has to "Maintain on-site the preventive maintenance plan required under section 4(c)(9) of this rule."

Pursuant to 326 IAC 2-7-4(c)(9), the Title V Permit Application has to include "Confirmation of the following: (A) That the source maintains on-site a preventive maintenance plan as described in 326 IAC 1-6-3(a)."

Pursuant to 326 IAC 1-6-3(a), "Any person responsible for operating **any facility specified in 326 IAC 1-6-1** shall prepare and maintain a preventive maintenance plan including the following information: ..."

According to 326 IAC 1-6-1, "This rule applies to the owner or operator of **any facility** required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1. " This source was required to obtain the permit under 326 IAC 2-5.1 as a major source.

Therefore, this source is required to prepare and maintain the Preventive Maintenance Plan (PMP) for the whole facility (all the emission units and emission control devices). The content and requirements concerning the PMP are described in Condition B.11.

No changes to the Permit were made.

#### **Comment 7:**

##### Condition D.1.11 Reporting Requirements

We believe that the sentence that reads in part "... to document compliance with Conditions D.1.1 and D.1.4 shall ..." may be a typographical error and possibly should read "... to document compliance with Conditions D.1.2 through D.1.4 shall ..."

#### **Response 7:**

The following changes were made to the permit:

##### D.1.11 Reporting Requirements

- (a) A quarterly summary of the information to document compliance with Conditions ~~D.1.1, D.1.2, D.1.3, and D.1.8~~ shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). **A customized reporting form may be used for alternative Nitrogen and Sulfur fuel content monitoring schedule, allowed by the U.S. EPA and described in Condition D.1.8(b).**

#### **Part 70 Quarterly Report**

Parameter: ~~Fuel Consumption~~, NOx Emissions (tons per month).

Limits: ~~Natural Gas consumption: 1,819 MMscf/yr per 12 months rolling average;~~ NOx emissions less than 250 tons per 12 months rolling monthly.

YEAR: \_\_\_\_\_

Quarter: \_\_\_\_\_

#### **Fuel Consumption (MMscf):**

	Column 1	Column 2	Column 1 + Column 2
Month			

	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

**Comment 8:**

Condition D.1.12 Nitrogen Oxides Budget Permit Application Submittal Requirement

We believe that there should be a section (d) similar to section (b) to cover unit GT4, to be added :

For NOx budget unit GT4 that commenced operation on or after January 1, 2001, the NOx authorized account representative shall submit a request for NOx allowances in accordance with 326 IAC 10-4-9(e) by September 1 of the calendar year that is one (1) year in advance of the first ozone control period for which the NOx allowance allocation is requested. The NOx authorized account representative shall submit a request each year that the units will require allowances from the new unit set aside until the unit is allocated allowances from the existing source pool. These requests shall be submitted by the NOx authorized account representative to:

Indiana Department of Environmental Management  
 Compliance Branch, Office of Air Quality  
 100 North Senate Avenue, P.O. Box 6015  
 Indianapolis, Indiana 46206-6015

**Response 8:**

Because the dates of NOx budget permit application submission and request for NOx allowances in accordance with 326 IAC 10-4-9(e) for turbines GT1 - GT3 and turbine GT4 are the same, the turbine GT4 was added to the list of turbines in Conditions D.1.12(a) and (b), condition D.1.12(c) was deleted. The following changes were made to the permit:

D.1.12 Nitrogen Oxides Budget Permit Application Submittal Requirement [326 IAC 10-4-4(a)(1)] [326 IAC 10-4-9(e)(2)]

- (a) For NOx budget units GT1, GT2, ~~and GT3,~~ **and GT4**, ~~that commenced operation prior to January 1, 2001,~~ the NOx authorized account representative shall submit a complete NOx budget permit application in accordance with 326 IAC 10-4-7 at least two hundred seventy (270) days prior to May 31, 2004. This application shall be submitted by the NOx authorized account representative to:

Indiana Department of Environmental Management  
 Permits Branch, Office of Air Quality  
 100 North Senate Avenue, P.O. Box 6015  
 Indianapolis, Indiana 46206-6015

- (b) For NOx budget units GT1, GT2, ~~and GT3,~~ **and GT4** that commenced operation on or after May 1, 2000, the NOx authorized account representative shall submit a request for NOx allowances in accordance with 326 IAC 10-4-9(e) by September 1 of the calendar year that is one (1) year in advance of the first ozone control period for which the NOx allowance allocation is requested. The NOx authorized account representative shall submit a request each year

that the units will require allowances from the new unit set aside until the units are allocated allowances from the existing source pool. These requests shall be submitted by the NOx authorized account representative to:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

- (c) ~~For NOx budget unit GT4 that commenced operation on or after January 1, 2001, the NOx authorized account representative shall submit a complete NOx budget permit application in accordance with 326 IAC 10-4-7 at least two hundred seventy (270) days prior to May 31, 2004. This application shall be submitted by the NOx authorized account representative to:~~

~~Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015~~

**Comments from Mr. Loeschner:**

**Comment 9:**

Fuel volume limit

The 13705 Condition D.1.3 1.819 billion standard cubic foot ("scf") per 12 consecutive month fuel limit is of no comfort as: 1) the fuel is not bounded by a cited definition of the fuel, i.e. it could be greater than 2.001 trillion gross calorific value ("GCV") British Thermal Units, and 2) there is reason to believe that the limit will be increased substantially as a result of allegations of error.

However, if IDEM were to enforce the 13705 Condition D.1.3. annual 1.819 billion scf gas fuel limit (and allow no other fuel) for a minimum of five (5) years beginning not later than 31 January 2003, it would be sufficiently environmentally protective that I would have no other objection whatsoever.

**Response 9:**

As explained in Response to Comment 4, the IPL Georgetown Substation Generating Plant four (4) natural gas turbines are "peaking units", and, according to 40 CFR 75, may report mass NOx emissions based on "load curve" NOx emission rates. This method is more reliable than compliance with a sourcewide fuel consumption limit based on a manufacturer maximum emission rate which does not reflect load and emission rate relation for individual turbines. Besides, to qualify for the "peaking units" status, the source will annually certify each gas turbine as having an average capacity factor of no more than 10% during the previous three calendar years and no more than 20% in each of those calendar years. The source will also keep records of the fuel (natural gas only) consumption, and there always will be an opportunity to check and verify the NOx emissions calculations correctness. A condition was added requiring IPL to install and operate the NOx CEMS if the NOx emissions from the source approach the 250 tons per year level - see Response 4.

No additional changes were made to the permit, except those described in Response to Comment 4.

**Comment 10:**

Natural gas definition



The noun phrase “natural gas” appears throughout 13705, including the D. condition. As, absent definition, the phrase is generic and unbounded (in particular in re-total sulfur content per scf or per GCV unit), “40 CFR 72.2 natural gas in accordance with 64 FR 28587 (26 May 1999)” should be specified explicitly.

Definitions which permit more than 2 grains of total sulfur per 100 scf must be rejected, as there seems nothing in the 990353 record indicative of a permitting authority having an intent to allow more than 2 grains of total sulfur per 100 scf in the Georgetown fuel.

If IPL is not to be obligated to that specific fuel for Georgetown, then the hierarchal permit body must contain explicit statements as to if the fuel sulfur is unlimited, or, if limited, what the limit is. If this is not amended as a response to comment in this process, then I request that the U.S. Environmental Protection Agency (“EPA”), IDEM, and The City of Indianapolis Office of Environmental Services (“OES”) classify the intentional noun phrase ambiguity as a 40 CFR 70.7(f)(1)(iii), IC 13-15-7-2(3)(A), “Material Mistake” and or as “inaccurate statements” (“MM, IS”) and reopen the permit promptly for such amendment.

If “40 CFR 72.2 natural gas in accordance with 64 FR 28587 (26 May 1999)” is not required for Georgetown, then the hierarchal permit body must contain a statement as to whether or not the Georgetown fuel is obligated to be “40 CFR 72.2 natural gas in accordance with 67 FR 40421 (12 June 2002).” If this is not amended as response to comment in this process, then I request that EPA, IDEM, and OES classify the fuel non-definition as a MM and or as IS and reopen the permit promptly for such amendment.

#### Response 10:

In order to more clearly define the fuel, a requirement to burn only “pipeline natural gas” was added. Because the most recent Acid Rain Permit is attached to the Permit, the reference to the Acid Permit number is not necessary, and it was deleted. Condition E.1(b) was also deleted because it was not necessary. The following changes were made to the Permit:

#### E.1 Acid Rain Permit [326 IAC 2-7-5(1)(C)] [326 IAC 21] [40 CFR 72 through 40 CFR 78]

- (a) ~~The Acid Rain permits for this source, AR 097-11116-00352, issued on April 4, 2000; and AR 097-12167-00352, issued on March 20, 2001, are incorporated by reference into this Part 70 permit.~~ Pursuant to 326 IAC 21 (Acid Deposition Control), the Permittee shall comply with all provisions of the Acid Rain permits and its revisions issued for this source, and any other applicable requirements contained in 40 CFR 72 through 40 CFR 78. **The Acid Rain permit for this source is attached to this permit as Appendix A, and is incorporated by reference.**
- ~~(b) Where an applicable requirement of the Clean Air Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions shall apply.~~
- ~~(b)(c)~~ **The Permittee shall burn only pipeline natural gas, as defined in the 40 CFR 72.2, in the turbines EU GT1, GT2, GT3, and GT4.**

#### Comment 11:

##### Heat input rate

I request that the maximum design GCV “40 CFR 72.2 heat input rate in accordance with 67 FR 40421 (12 June 2002)” for all 4 CT be included in the 13705 A.2 Conditions as well as the D.1 description box. If this is not amended as response to comment in this process, then I request that the EPA, IDEM, and OES classify the omission or error as a MM and or as IS and reopen the permit promptly for such amendment.

Further, the hierarchy of D.1(a) appears unnecessary.

**Response 11:**

A reference to 40 CFR 72.2 definition of "Heat Input" (as a "product... of the gross calorific value (GCV) of the fuel... and the fuel feed rate into the combustion device...") is added to the Permit Condition A.2 and description box of Section D (see Response to Comment 3). No additional changes were made to the Permit.

The format of the Section D.1 Description box was changed - see Response to Comment 3.

**Comment 12:**

Federal enforceability

13705 Condition D.1.3 (having no mathematical relationship (in the hierarchal permit body) to approximately 250 tons per year ("tpy") of mixed nitrogen oxides ("NOx") or to approximately 250 tpy of carbon monoxide ("CO")), with compliance based on 13705 Condition D.1.7, is contumacious of the "40 CFR 51.165(a)(1)(xiv) federally enforceable" definition. A definition of federally enforceable is absent from 40 CFR 70, however "40 CFR 70.2 emissions allowable under the permit" mentions the phrase and the idea that a test once every 2 years can in any way serve to protect the 42 USC 7479(1) emissions cap on a more or less continuous basis is false. Among many faults is that the D.1.7 testing does not aggregate the emissions from start-up and shut-down operation ("SU/SD").

The draft 990353 construction permit for the first Georgetown phase was published for comment 6 August 1999, and it was issued 16 September 1999, more than 16 weeks following the publication of 64 FR 28587 (26 May 1999).

The Georgetown campus first phase 264 MW total from 3 CT, permitted 16 September 1999, was approximately twice the size of the Cinergy (065-10469-00032,

<ftp://ftp2.ai.org/pub/idem/oam/10469f.pdf>"10469" incorporated herein by reference) Cadiz campus of approximately 132 MW total from 3 CT permitted 15 July 1999, yet there are extreme permit compliance determination differences. 10469 Condition D.11(a) is clear. Continuous emission monitoring ("CEM"), which aggregates SU/SD emission, is required on each of the three 44 MW 10469 CT stacks for NOx and for CO. It was wrong to allow the three 88 MW Georgetown CT stacks sans CEM, and, with its growth to four 88 MW CT, absolutely nothing less than the 10469 compliance methodology is appropriate for all 4 of the Georgetown CT stacks for both NOx and CO. There is a presumption that Georgetown was partially functional during the famous year 2000 "\$7,000 per megawatthour sale" – something that by chance Cinergy was apparently not able to enjoy. The costs of CEM are not inconsequential, however it is well within IDEM's 326 IAC 3-5-1(d)(1) and 40 CFR 70 authority to demand that CO and NOx compliance determination for Georgetown be via individual CEM (8 total). If the 8 requested CEM are not obligated as a response to comment amendment in this 13705 process, then I request that EPA, IDEM, and OES classify the omission of the 8 CEM and a MM and reopen the permit promptly for such amendment.

**Response 12:**

NOx is a constraining pollutant. That is, effectively limiting NOx emissions below 250 tons per year ensures that CO emissions will be less than 250 tons per year as well. A requirement to install Continuous Emissions Monitoring Systems (CEMS) for NOx emissions monitoring was added to the Permit (see Response to Comment 4).

The phrase "...including periods of turbines startup and shutdown" was added to the permit condition D.1.3 (PSD Minor Source Limit) - see Response to Comment 4.

No additional changes were made to the permit.

**Comment 13:**

Measurement uncertainty

Here is a situation that must not be allowed by a minor or synthetic minor source: 1) a source operates within all numeric measured permit conditions, and 2) while operating in accordance with point 1, the source actually emits 250 or more tpy of CO, NOx, or SO<sub>2</sub>.

For example, there may be a 249.99 tpy NOx limit controlled by CEM. There is measurement uncertainty in the stack gas volume rate flow and in the stack gas NOx mass per unit volume concentration. With only a 3% uncertainty in both of the measurements, there is a possibility of  $249.99 \times 1.03 \times 1.05 = 265$  tpy NOx emission – a violation. There is of course no law of physics that prohibits such a cumulation of measurement uncertainty.

Thus, permitting authorities are reasonably required to identify measurement uncertainties for each portion of a measurement and to then subtract all such possible cumulative uncertainty prior to establishing a limit wherever crossing a threshold would cause a different type of permit to be obligated. Therefore, for example, if there was found to be possible measurement uncertainty of 4% in the stack gas volume rate flow and 3% in the stack gas NOx mass per unit volume concentration; then this limit would protect a 249.99 tpy cap: a limit that the cumulation of the CEM NOx in every 12 consecutive month period not exceed 233.37 tpy.  
 $233.37 \times 1.04 \times 1.03 = 249.986$

The source has the full privilege of requesting higher limits that approach asymptotically closer to the 42 USC 7479(1) threshold values when the source submits suitably scientific proof that it has the ability to reduce a measurement uncertainty.

**Response 13:**

There is a range of precision or uncertainty associated with any measurement. If there is a known bias in a given method, the agencies can modify the method to minimize that bias. As long as there is no demonstrated bias, the U.S. EPA and the IDEM are required by law to compare the results of performance test to emission limits on an absolute basis. Mr. Loeschner has pointed only to uncertainty and not bias in his comment.

No changes were made to the permit.

=====  
Upon further review, the OAQ and OES made the following corrections to the regulatory citations in the Permit:

Page 9, Condition B12 (Emergency Provisions):

.....

- (e) IDEM, OAQ, and OES may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(10) **(9)** be revised in response to an emergency.

Page 10, Condition B13 (Permit Shield):

- (g) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, and OES has issued the modification. [326 IAC 2-7-12(b)(7)(8)].

Page 16, Condition B24 (Annual Fee Payment):

B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][326 IAC 2-1.1-7]  
.....

Following the U.S. EPA's approval of the source's request for a custom monitoring schedule for natural gas Nitrogen and Sulfur content, obtained after this Part 70 Permit was drafted, the following changes were made to the permit:

Page 25, Condition D.1.8 (Sulfur and Nitrogen content [40 CFR 60.334]):

D.1.8 Sulfur and Nitrogen content [40 CFR 60.334]

- (a) Pursuant to 40 CFR 60, Subpart GG, 60.334(b), the Permittee shall monitor the Sulfur Content and Nitrogen Content of the fuel being fired in Emission Units ID GT1, GT2, GT3, and GT4 daily, in accordance with 40 CFR 60.335 (d).
- (b) Alternatively, the Permittee may use the **following** custom schedule for **pipeline** natural gas firing allowed by 40 CFR 60.334(b), ~~after its approval by the U.S. EPA.~~ **as approved by the U.S. EPA on March 18, 2003:**
  - (1) **Monitoring of fuel Nitrogen Content will not be required since pipeline natural gas is the only fuel fired in the turbine;**
  - (2) **Measurement of Sulfur Content of the pipeline natural gas will be conducted by manual sampling followed by analysis. Sulfur Content will be determined via any of the following ASTM methods: ASTM D1072-90, ASTM D4084-94, ASTM D4468-85, ASTM D5504-94, or ASTM D3246-81. The Applicable ranges of some ASTM methods are not adequate to measure the levels of Sulfur in some fuel gases. Dilution of samples before analysis (with verification of the dilution ratio) may be used, subject to the approval of the EPA Administrator.**
  - (3) **Initial samples must be collected and analyzed twice a month for six months. If six months of bi-monthly sampling and analysis indicate that Sulfur concentrations are well below the applicable standard with low variability, the sampling frequency will be reduced to quarterly monitoring.**
  - (4) **If six quarters of quarterly sampling and analysis indicated Sulfur concentrations are well below the applicable standard with low variability, the sampling frequency will be reduced to semi-annual monitoring.**
  - (5) **If any analyses indicate noncompliance with the applicable Sulfur limit of 0.8 weight percent in 40 C.F.R. 60.333 (b), samples must be collected and analyzed on a weekly basis while the custom fuel monitoring schedule is re-examined. IPL-Georgetown plant should notify IDEM, OAQ, OES, and the U.S. EPA of the exceedance in accordance with 40 C.F.R. 60.7(c).**
  - (6) **If there is a substantial change in fuel quality, samples must be collected and analyzed on a weekly basis while the custom fuel monitoring schedule is re-examined.**
  - (7) **Records of sample analyses and fuel supply information related to Sulfur content of the fuel will be retained for at least three years and shall be available for inspection upon request.**

**Indiana Department of Environmental Management  
Office of Air Quality  
and  
Indianapolis Environmental Resources Management Division**

**Technical Support Document (TSD) for a Part 70 Operating Permit**

**Source Background and Description**

**Source Name:** IPL Georgetown Substation Generating Plant  
**Source Location:** 8198 Georgetown Road, Indianapolis, Indiana  
**County:** Marion  
**SIC Code:** 4911  
**Operation Permit No.:** T097-13705-00352  
**Permit Reviewer:** Boris Gorlin

The Indiana Department of Environmental Management, Office of Air Quality (OAQ) and the Indianapolis Office of Environmental Services (OES) have reviewed a Part 70 permit application from the DTE Georgetown, LLC relating to the operation of the IPL Georgetown Substation Power Generating Plant .

**Permitted Emission Units and Pollution Control Equipment**

The source consists of the following permitted emission units and pollution control devices:

Four (4) General Electric simple cycle, natural gas-fired combustion turbines EU GT1, GT2, GT3 (commenced operation on May 2, 2000), and GT4 (commenced operation on April 24, 2001), rated at 88.4 MW (301.8 MMBtu/hr) each at peak load (59 degrees Fahrenheit at 860 feet), exhausting to stacks ID GT-1, GT-2, GT-3, and GT-4. Nitrogen Oxide (NO<sub>x</sub>) emissions are controlled by dry low NO<sub>x</sub> combustors.

**Unpermitted Emission Units and Pollution Control Equipment**

There are no unpermitted facilities operating at this source during this review process.

**Insignificant Activities**

This source does not currently have any insignificant activities, as defined in 326 IAC 2-7-1(21).

**Existing Approvals**

The source has been operating under previous approvals including, but not limited to, the following:

- (a) CP 097-9900352-00352, issued on September 17, 1999;
- (b) Acid Rain Program Permit AR 097-11116-00352, issued on April 4, 2000;
- (c) Minor Source Modification 097-12335-00352, issued on July 20, 2000.
- (d) Administrative Amendment to Acid Rain Permit AA 097-12167-00352, issued on March 20, 2001;

All conditions from previous approvals were incorporated into this Part 70 permit.

An error in the gas turbines MMBtu/hr heat input capacity (301.8 MMBtu/hr each turbine, instead of 924) was corrected, from the initial Construction Permit 097-9900352-00352 and Minor Source Modification 097-12335-00352 was corrected; correspondingly, the fuel throughput limit was changed to 1,819 MMdscf/yr of natural gas (all four turbines) instead of 5,570 MMdscf/yr.

### Enforcement Issue

There are no enforcement actions pending.

### Recommendation

The staff recommends to the Commissioner that the Part 70 permit be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete Part 70 permit application for the purposes of this review was received on January 4, 2001.

No Notice Of Completeness letter was mailed to the source.

### Emission Calculations

See Appendix A of this document for detailed emissions calculations (one page).

### Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	87.6
PM-10	87.6
SO <sub>2</sub>	10.9
VOC	31.5
CO	911.0
NO <sub>x</sub>	1,384

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Potential To Emit (tons/year)
Formaldehyde	9.5
TOTAL	9.5

Note: Other single HAPs emissions are nondetectable.

- (a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of Nitrogen Oxides (NO<sub>x</sub>) and Carbon Oxide (CO) are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) Fugitive Emissions  
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are not counted toward determination of PSD and Emission Offset applicability.

### Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 2001 OES/OAQ emission data.

Pollutant	Actual Emissions (tons/year)
PM	5.48
PM-10	5.48
SO <sub>2</sub>	0.238
VOC	4.93
CO	45.02
NO <sub>x</sub>	9.37
HAP (specify)	0.00

### Potential to Emit After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 operating permit.

	Potential to Emit (tons/year)						
Process/facility	PM	PM-10	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	HAPs
Four (4) General Electric simple cycle, natural gas-fired combustion turbines EU GT1, GT2, GT3, and GT4	<0.03 gr/dscf <sup>1</sup>	<0.03 gr/dscf <sup>1</sup>	<0.015 percent by volume, or use of natural gas fuel with a sulfur content less than or equal to 0.8 percent by weight <sup>2</sup>	<250 <sup>3</sup>	<250 <sup>3</sup>	<250 <sup>4</sup>	1.71
Insignificant Activities	0	0	0	0	0	0	0
Total Emissions	<250	<250	<250	<250	<250	<250	<10

1 - Pursuant to 326 IAC 6-1-2(a), Particulate Emission Limitations; Fuel Combustion Steam Generators;  
2 - Pursuant to NSPS 40 CFR 60, Subpart GG (Stationary Gas Turbines);

- 3 - Resulting from NO<sub>x</sub> (constraining pollutant) emissions and fuel consumption limits;  
4 - Limited to less than 250 tons/yr, **therefore** 326 IAC 2-2 and 40 CFR 52.21 do not apply.

### County Attainment Status

The source is located in Marion County.

Pollutant	Status
PM-10	Attainment
SO <sub>2</sub>	Maintenance
NO <sub>2</sub>	Attainment
Ozone	Maintenance
CO	Attainment
Lead	Attainment

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Marion County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Marion County has been classified as attainment or unclassifiable for all the criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

### Part 70 Permit Conditions

This source is subject to the requirements of 326 IAC 2-7, pursuant to which the source has to meet the following:

- (a) Emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of issuance of Part 70 permits.
- (b) Monitoring and related record keeping requirements which assume that all reasonable information is provided to evaluate continuous compliance with the applicable requirements.

### Federal Rule Applicability

- (a) 40 CFR 60, Subpart GG (Stationary Gas Turbines):  
The gas turbines (EU GT1, GT2, GT3, and GT4) are subject to the New Source Performance Standard, 326 IAC 12, (40 CFR Part 60.330, (Subpart GG)), since the heat input capacity is greater than 10.7 gigajoules per hour, based on the lower heating value of the fuel fired.

Pursuant to 326 IAC 12-1 and 40 CFR 60, Subpart GG (Stationary Gas Turbines), the Permittee shall:

- (1) limit nitrogen oxides emissions, as required by 40 CFR 60.332, to:

$$\text{STD} = 0.0075 \frac{(14.4)}{Y} + F,$$

where STD = allowable NO<sub>x</sub> emissions (percent by volume at 15 percent oxygen on a dry basis).

Y = manufacturer's rated heat rate at manufacturer's rated load (kilojoules per watt hour)



or, actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour.

F = NO<sub>x</sub> emission allowance for fuel-bound nitrogen as defined in paragraph (a)(3) of 40 CFR 60.332.

- (2) limit sulfur dioxide emissions, as required by 40 CFR 60.333, to 0.015 percent by volume at 15 percent oxygen on a dry basis, or use natural gas fuel with a sulfur content less than or equal to 0.8 percent by weight;
- (3) daily monitor the sulfur content and nitrogen content of the fuel being fired in the turbine, as required by 40 CFR 60.334(b). The initial Construction Permit 097-9900352-00352 allowed the alternative custom schedule of nitrogen and sulfur content - to be "obtained and analyzed within thirty (30) days of each one (1) billion standard cubic feet landmark consumption period." According to 40 CFR 60.334(b), this custom schedule requires the EPA approval. Therefore, the current Part 70 permit requires the standard (daily) nitrogen and sulfur monitoring in accordance with the NSPS 40 CFR 60, Subpart GG, until the source obtains the EPA's approval for the custom schedule.
- (4) report periods of excess emissions, as required by 40 CFR 60.334(c).
- (b) 40 CFR Part 72-80 (Acid Rain Program)  
This source is subject to the requirements of 40 CFR Part 72-80 (Acid Rain Program). The requirements of this program are detailed in the Phase II Acid Rain Permits: AR 097-11116-00352, issued on April 4, 2000, and AR 097-12167-00352, issued on March 20, 2001.
- (c) There are no other New Source Performance Standards (326 IAC 12) and 40 CFR Part 60 applicable to this facility.
- (d) There are no NESHAP 40 CFR Part 63 applicable to this facility.

#### **State Rule Applicability - Entire Source**

##### **326 IAC 1-7 (Stack Height Provisions)**

This source is not subject to 326 IAC 1-7 because its potential Particulate Matter emissions (after compliance with the constraining NO<sub>x</sub> limit) is less than 25 tons per year.

##### **326 IAC 1-5-2 (Emergency Reduction Plans)**

The source is subject to 326 IAC 1-5-2 (Emergency Reduction Plans), and 326 IAC 1-5-3 (Implementation of approved plans) because the source's CO and NO<sub>x</sub> PTE are greater than 100 tons per year.

The source has submitted an Emergency Reduction Plan (ERP) on July 14, 2000. The ERP has been verified to fulfill the requirements of 326 IAC 1-5-2.

##### **326 IAC 2-2 (Prevention of Significant Deterioration):**

- (a) The potential to emit of NO<sub>x</sub> (the constraining pollutant) and CO from the four (4) Gas Turbines EU ID's GT1, GT2, GT3, and GT4 shall be limited to less than 250 tons per twelve (12) consecutive months, rolled on a monthly basis. Therefore, the Prevention of Significant Deterioration (PSD) rules, 326 IAC 2-2 and 40 CFR 52.21, will not apply. By limiting the NO<sub>x</sub> and CO emissions to less than 250 tons per year, the SO<sub>2</sub>, PM, PM10 and VOC emissions are also less than 250 tons per year.
- (b) Gas Turbines GT1, GT2, GT3, and GT4 combined natural gas consumption shall be limited to 1,819

million standard cubic feet per 12 consecutive months rolled on a monthly basis, which is equivalent to NO<sub>x</sub> emission below 250 tons per year.

This limit is based on the manufacturer's maximum NO<sub>x</sub> emission rate of 79 pounds per hour for each Gas Turbine GT1, GT2, GT3, and GT4. The actual NO<sub>x</sub> emission rates demonstrated during the initial stack test, performed in accordance with the Construction Permit 097-0990352-01 Operation Condition 6, do not exceed 79 lb/hr.

These limitations will ensure this source stays below 250 tons per year of NO<sub>x</sub> such that the Prevention of Significant Deterioration (PSD) rules, 326 IAC 2-2 and 40 CFR 52.21, will not apply. The initial Construction Permit 097-0990352-01 allowed the source, as an alternative, after the initial stack test, during which the fuel-and-unit-specific NO<sub>x</sub> emission rates ("load curve") had to be established, to report the NO<sub>x</sub> mass emissions in accordance with the procedures regulated by 40 CFR Part 75. In accordance with 40 CFR Part 75, §75.19, to qualify for this alternative method of NO<sub>x</sub> mass emissions calculations and reporting, the source must provide an initial demonstration that each unit emits no more than 50 tons of NO<sub>x</sub> and no more than 25 tons of SO<sub>2</sub> annually, and submit a certification application to use the low mass emissions excepted methodology. The source submitted such application to the U.S. EPA, IDEM, and OES on June 8, 2001. The source's quarterly emission reports and annual emission statements demonstrate that the NO<sub>x</sub> and SO<sub>2</sub> actual emissions are, respectively, no more than 50 and 25 tons per unit annually.

Therefore, the Permittee shall continue to report the NO<sub>x</sub> mass emissions based on the fuel-and-unit-specific NO<sub>x</sub> emission rates established during the initial stack test, in accordance with 40 CFR Part 75, Appendix E (Optional NO<sub>x</sub> Emissions Estimation Protocol for Gas-Fired and Oil-Fired Peaking Units), and monthly fuel consumption. The most recent Stack Test was performed on April 24, 2001.

326 IAC 2-4.1-1 (New Source Toxics Control)

This rule is not applicable because single HAP (formaldehyde) emissions are not greater than or equal to 10 tons per year and the combination HAPs' emissions are not greater than or equal to 25 tons.

326 IAC 2-6 (Emission Reporting):

This source is subject to 326 IAC 2-6 (Emission Reporting), because the source emits more than 100 tons/yr of NO<sub>x</sub>, and CO. Pursuant to this rule, the owner/operator of this source must annually submit an emission statement of the facility. The annual statement must be received by April 15 of each year and must contain the minimum requirements as specified in 326 IAC 2-6-4.

326 IAC 5-1-2 (Opacity Limitations):

Pursuant to 326 IAC 5-1-2 (Opacity Limitations) except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), the opacity shall meet the following:

- (a) Opacity shall not exceed an average of 30% any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed 60% for more than a cumulative total of 15 minutes (60 readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute non-overlapping integrated averages for a continuous opacity monitor) in a 6-hour period.

326 IAC 6-1-2 (Particulate Emissions Limitations, Section 2(a), General Sources)

Since the source is located in Marion County, emissions from each turbine shall be limited to 0.03 grain per dry standard cubic foot. Potential PM (PM<sub>10</sub>) emission is 0.0011 grain per dry standard cubic foot, therefore, the source will be in compliance with this rule.

**326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating)**

This rule does not apply to the turbines because the units are not utilized for indirect heating.

**326 IAC 6-4 (Fugitive Dust Emissions)**

Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions), the Permittee shall be in violation of 326 IAC 6-4 (Fugitive Dust Emissions) if any of the criteria specified in 326 IAC 6-4-2(1) through (4) are violated. Observations of visible emissions crossing the property line of the source at or near ground level must be made by a qualified representative of IDEM or OES [326 IAC 6-4-5(c)].

**326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)**

This rule does not apply to this source because it has only paved roads, and its potential fugitive particulate matter emission is less than twenty-five (25) tons per year.

No other 326 IAC 6 rules apply.

**326 IAC 7-1 (Sulfur Dioxide Emission Limitations)**

This rule does not apply to the combustion turbines EU ID's GT1, GT2, GT3, and GT4 because their potential to emit SO<sub>2</sub> is less than 25 tons per year.

**326 IAC 8-1-6 (New facilities; general reduction requirements)**

This rule does not apply to the combustion turbines EU ID's GT1, GT2, GT3, and GT4 because the potential VOC emissions are less than 25 tons per year per unit.

No other 326 IAC 8 rules apply.

**326 IAC 10-4 (NO<sub>x</sub> Budget Trading Program)**

Pursuant to 326 IAC 10-4-2(16) the units GT1, GT2, GT3, and GT4 are considered "electricity generating units (EGU)" because they commenced operation on or after January 1, 1999 and serve as generators at any time that have a nameplate capacity greater than twenty-five (25) megawatts each that produces electricity for sale under a firm contract to the electric grid. Pursuant to 326 IAC 10-4-1(a)(1), an "EGU" is a NO<sub>x</sub> budget unit. Because this source meets the criteria of having one (1) or more NO<sub>x</sub> budget units, it is a NO<sub>x</sub> budget source. The Permittee shall be subject to the requirements of this rule.

Since the units GT1, GT2, GT3, and GT4 commenced operation after May 1, 2000, the units were not allocated NO<sub>x</sub> allowances for the 2004, 2005, and 2006 ozone seasons from the existing EGU budget under 326 IAC 10-4-9(b)(1)(A). Therefore, if the NO<sub>x</sub> authorized account representative requires NO<sub>x</sub> allowances to be allocated, the NO<sub>x</sub> authorized account representative shall submit a written request to the IDEM, OAQ for NO<sub>x</sub> allowances in accordance with 326 IAC 10-4-9(e)(2) and (3).

Pursuant to 326 IAC 10-4-12(c), the Permittee shall install the appropriate monitoring systems and complete all certification tests as required by 326 IAC 10-4-12(b)(1) through (3) on or before May 1, 2003. The Permittee shall record, report, and quality assure the data from the monitoring systems on and after May 1, 2003.

## **Compliance Requirements**

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs, IDEM, OAQ and OES, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

Pursuant to the NSPS 40 CFR, Part 60, Subpart GG, the Permittee is required to to perform standard (daily) natural gas nitrogen and sulfur content monitoring in accordance with 40 CFR 60.334(b), until obtaining the EPA's approval for the custom (periodic monitoring) schedule, as required by 40 CFR 60.334(b)(2).

## Conclusion

The operation of this Natural Gas Power Generating Turbines shall be subject to the conditions of the attached proposed **Part 70 Permit No. T097-13705-00352**.

			TSD Addendum Appendix A: Emissions Calculation						Page 1 of 1	
Emission Unit IDs GT1, GT2, GT3, and GT4										
General Electric			Company Name: IPL Georgetown Substation Generating Plant							
Natural Gas simple cycle combustion powered electric generators			Address City IN Zip: 8138 Georgetown Road, Indianapolis, Indiana 46268							
			Permit No.: T097-13705-00352							
			Plt ID: 097-00352							
			Reviewer: Boris Gorlin							
Natural Gas										
Heat Input Capacity, MMBtu/hr			Potential Throughput						S = Weight % Sulfur	
One Turbine:			7,709 MMdscf/yr						8.10E-04	
924.0			30,835 MMdscf/yr							
Four Turbines combined:										
3,696.00										
			Pollutant							
			PM	PM10	SO2	NOx	VOC	CO	Formaldehyde	
Manufact. Emission Rate in lb/hr (one turbine):			5	5	0.62	79	1.8	52	30% of VOC*	
Manufact. Emission Rate in lb/hr (4 turbines combined):			20	20	2.48	316	7.2	208	30% of VOC*	
Manufact. Emission Rate in lb/MMBtu:			0.0054	0.0054	0.0007	0.0855	0.0019	0.0563	0.0006	
PTE in tons/yr (4 turbines):			87.60	87.60	10.862	1,384.08	31.536	911.04	9.461	
Limited Emissions, less than (ton/yr):			250	250	250	250	250	250	10	
Total (4 turbines) emissions at NOx (constraining pollutant) limited emission, less than (ton/yr):			15.823	15.823	1.962	250	5.696	164.557	1.709	
At 16% capacity factor ("trigger" level for CEMS), less than:			221							
Methodology										
Heat Input Capacity: 924 MMBtu/hr (Manufacturer specifications)										
Potential Throughput (MMscf/yr) = Heat Input Capacity (MMBtu/hr) x 8,760 hr/yr x 1MMscf / 1050 MMBtu										
Emission Rates at peak conditions, lb/hr, are supplied by the source (manufacturer data).										
Emission (tons/yr) = Emission Rate (lb/hr) x 8760 hr/yr x 1 ton/2,000 lb										
Total Emissions at NOx limited emissions level: PTE (tpy) x [250 (tpy) / NOx PTE (tpy)].										
* Formaldehyde Emission is 30% of VOC (the EPA "Speciate" program).										
326 IAC 6-1-2 (Particulate Emissions Limitations, Section 2(a), General Sources)										
Potential PM10 Emissions, ton/yr (4 turbines), ton/yr			87.6							
or: grain/dscf (at 523,615x4=2,094,460 dscfm) =			0.0011							